



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

entered

April 12, 2000

4WD-PSB

SENT VIA FAX AND
CERTIFIED MAIL RETURN RECEIPT REQUESTED

Exide Corporation
Attn: Ari D. Levine, Esquire
Director, Regulatory Affairs
645 Penn Street
Reading, Pennsylvania 19601

10079220



SUBJ: Agreement for Recovery of Past Response Costs
Westgate Mobile Homes Superfund Site, Greer, South Carolina
EPA ID No. 0000487678
Site ID No. 04WU

Dear Mr. Levine:

The United States Environmental Protection Agency (EPA) hereby notifies you that the thirty-day public comment period required by Section 122(i) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9622(i), regarding the Agreement for Recovery of Past Response Costs (Cost Recovery Agreement) for the Westgate Mobile Homes Superfund Site located in Greer, South Carolina, has expired. EPA did not receive any comments that disclose facts or considerations which indicate that the Cost Recovery Agreement is inappropriate, improper or inadequate. Therefore, EPA has finalized the Cost Recovery Agreement (an executed copy of which is enclosed).

The effective date of the Cost Recovery Agreement is the date of this written notice stating that the public comment period has expired. Under Section V, Paragraph 10 of the Cost Recovery Agreement, dated February 24, 2000, payment of \$250,000 is due from the Settling Parties within thirty (30) days of the effective date of the Cost Recovery Agreement.

Under Section V, Paragraph 11 of the Cost Recovery Agreement, dated February 24, 2000, payment of \$250,000.00 is due from the Exide Corporation. Accordingly, please submit payment of the \$250,000.00 as set forth in the terms of the Cost Recovery Agreement.

Payment shall be made by certified or cashier's check, made payable to "EPA Hazardous Substances Superfund." Each check shall reference the name of the

Settling Party, the Site/Spill ID 04WU and the name of the Site and shall be sent to:

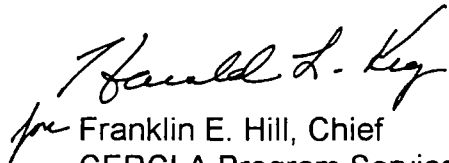
U.S. Environmental Protection Agency - Region 4
Superfund Accounting
P.O. Box 100142
Atlanta, Georgia 30384
Attn: Collection Officer in Superfund

A copy of each check shall simultaneously be sent to Ms. Paula V. Batchelor at:

U.S. Environmental Protection Agency - Region 4
CERCLA Program Services Branch
Waste Management Division
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

If you have any questions, please contact Billy D. Bright at (404) 562-8868 or
Rueben Bussey, Assistant Regional Counsel, at (404) 562-9673.

Sincerely yours,


for Franklin E. Hill, Chief
CERCLA Program Services Branch
Waste Management Division

Enclosure: Cost Recovery Agreement



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

March 27, 2000

4WD-NSMB

Mr. Gary W. Poliakoff
Poliakoff and Associates, P.A.
215 Magnolia Street
P.O. Box 1571
Spartanburg, South Carolina 29304

Subj: Exide Corporation - Exide Battery, Greer, South Carolina
National Enforcement Investigations Center (NEIC) Report

Dear Mr. Poliakoff:

EPA received your letter dated March 7, 2000, concerning the Exide Battery Site in Greer, South Carolina. The following information should help clarify the status of the NEIC report and its role in EPA's actions at this site.

The study conducted by NEIC was undertaken at the request of EPA Region 4's Air and Superfund programs in order to support EPA and/or State enforcement actions if needed, and to support EPA's cost recovery position for the 1994 Removal Action conducted in the trailer park. NEIC notified Region 4 by memorandum in April 1997 that it would undertake the study. Written summary updates were provided by NEIC in May 1998 and January of 1999. Since that time, EPA has reached a settlement with Exide Corporation regarding EPA's past response costs at the site, and the settlement is currently open for public comment. Because the study has fulfilled its intended purpose, once the settlement was reached, we advised NEIC that Region 4 no longer had need for a completed project. NEIC has indicated their desire to complete the project under its own funding. EPA expects to receive a copy of NEIC's final report when it becomes available. NEIC has advised us that they expect to complete their final report within the next three months.

We hope this information is useful to you. If you have any questions on this matter, please call me (404/562-8792) or Ralph Howard of my staff (404/562-8829), at any time.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Norman", followed by a horizontal line.

Mike Norman, Chief
South Carolina Remedial Section

cc: Reuben Bussey, EPA
Ralph Howard, EPA
Steve Machemer, NEIC/Denver

LAW OFFICES

Poliakoff and Associates, P.A.
215 Magnolia Street
Spartanburg, South Carolina 29306

MAILING ADDRESS:

P.O. BOX 1571

SPARTANBURG, SOUTH CAROLINA 29304

TELEPHONE: (864) 582-5472

(864) 582-8101

FACSIMILE: (864) 582-7280

GARY W. POLIAKOFF
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RAYMOND P. MULLMAN, JR.
RMulmanjr@aol.com

BERNARD B. POLIAKOFF

1916-1985

J. MANNING POLIAKOFF

1923-1988

MATTHEW POLIAKOFF

1919-1979

March 7, 2000

Mr. Mike Norman
Section Chief
United States Environmental Protection Agency
Region IV
Atlanta Federal Center
Atlanta, GA 30303-8909

**RE: Exide Corporation - Greer, South Carolina
NEIC Report**

Dear Mr. Norman:

We represent a number of residents of two communities adjacent to the former Exide facility in Greer, South Carolina. For a number of years Exide Corporation denied responsibility for high levels of lead contamination in Westgate Trailer Park and in King Acres subdivision, both adjacent to its lead acid battery facility. The matter was referred to the NEIC. Approximately 2 years ago the NEIC issued a draft report, indicating that the lead levels in Westgate Trailer Park most probably emanated from the Exide facility. However, during these past two years NEIC has yet to issue a final report. We understand that this is an abnormally long period of time, with extensive unexplained delays, in the issuance of the final report. We have written the NEIC on several occasions asking for the final report. We have been informed that it is forthcoming.

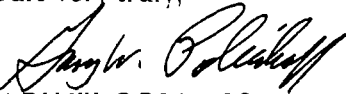
We understand that you are the section chief at Region 4 EPA regarding this matter. We respectfully request that you inquire from the NEIC as to the cause of any delays in the issuance of the final report. We also request that you ask the NEIC to go ahead and issue this report without further delay. Please understand that this matter is far from moot. In fact, Exide is currently negotiating with South Carolina D.H.E.C. for a clean-up level in King Acres significantly higher than EPA and HUD recommended levels.

Page two
March 7, 2000

We appreciate your assistance, and we look forward to hearing from you regarding the delay of this NEIC report.

With best regards I am,

Yours very truly,


GARY W. POLIAKOFF
Attorney at Law

GWP/cb

cc: Mr. Scott Wilson, DHEC
Mr. Gary Stewart, DHEC
Mr. Steve Machemer, Project Leader, NEIC
Mr. Chuck Aschwanden, General Counsel NEIC
Mr. Reuben Bussey, US EPA, Region IV
Mr. Warren Dixon, US EPA Region IV
✓ Mr. Ralph Howard, US EPA, Region IV

Phone Call Notes

R.O. Howard, RPM/NEMB
with: Reuben Bussey, EAD

June 24, 1999
11:15 AM

- Exide called Tuesday on this...
- Ari Levine has asked us URGENT to "take over whole thing": trailer park, plant, King's Acres, etc.
- Asked Reuben to ask us (SF) to get the State to consider the BFields considerations ... IF Ari Levine can get the cleanup number he wants can control environm. costs. Exide wants to sell entire plant.
- Will we participate in a 3-way conference call? [State-EPA-Exide] Needs to be soon...

FAX TRANSMISSION

**BUREAU OF LAND & WASTE MANAGEMENT, DEPARTMENT OF HEALTH & ENVIRONMENTAL
CONTROL**

2600 Bull Street
Columbia, SC 29201
(803)896-4252
Fax: (803)896-4282

To: Ralph Howard

Date: June 21, 1999

Fax #: 1-404-562-8628

Pages: 3, including this cover sheet.

From: Karen J. Sprayberry

Subject: Exide/Westgate Trailer Park Site

COMMENTS:

**FACT SHEET**

Exide Corporation/General Battery Site
Greer, South Carolina
June 21, 1999

PUBLIC MEETINGS:

The South Carolina Department of Health and Environmental Control ("SCDHEC") will hold two Public Meetings on Thursday, June 24, 1999 in Greer, South Carolina, to discuss a lead contamination problem at Westgate Trailer Park, Greer, SC. The first meeting will begin at 11:00 a.m. and will be held at CenterQuest located at 102 Chick Springs Road, Greer. (CenterQuest is located in the same building as the Manager's Office for the trailer park.) The evening meeting will begin at 7:00 p.m. and will be held at the J. Verne Smith Human Resources Center, 202 Victoria Street, Greer, SC.

During both Public Meetings, SCDHEC will talk about its most recent findings at the Westgate Trailer Park and plans for removing lead contaminated soils from the park in the near future. Members of the community will also be given an opportunity to ask questions and express any concerns they have about this site.

SITE LOCATION:

Immediately adjacent to the former Exide Corporation ("Exide") facility site to the east is the Westgate Trailer Park ("Site") located at the corner of Old Buncombe Road and Chick Spring Road in Greer, South Carolina.

SITE HISTORY:

The 5 acre trailer park was established between 1968 and 1970, and consists of approximately 53 mobile homes. The manufacturing of lead acid batteries on the adjacent property began in the early 1960's by Bowers Battery, which later changed its name to General Battery and Ceramic Corporation, and in 1968, to General Battery Corporation. Exide began operation at the site in May 1987.

An earthen lagoon was constructed at the site in the early 1960's for treatment of wastewater. Groundwater subsequently became contaminated with lead and sulfates. The lagoon was not used after the construction of a pretreatment system was built. In 1986, SCDHEC determined that soil in the drainage area at the rear of the property was contaminated with lead. An agreement signed between SCDHEC and Exide required all areas at the Exide site that had soil contamination be cleaned up. During the clean up, Exide removed approximately 1039 tons of soil. On August 24, 1990, Exide notified SCDHEC that soil remediation was complete.

In January 1992, SCDHEC collected three soil samples from the Westgate Trailer Park and found the total lead concentrations to be 270 parts per million (ppm), 560 ppm, and 800 ppm. In June 1994, the United States Environmental Protection Agency's (USEPA's) contractor collected fifty-five shallow soil samples across the trailer park. Results of these samples found the total lead concentrations ranged from 42.1 ppm up to 2110 ppm. Six locations had total lead concentrations greater than 500 ppm and were excavated by USEPA. Approximately 1200 tons of contaminated soil was removed from these areas and clean soil was placed into the area.

Since then, SCDHEC has continued to monitor the area by collecting soil and residential blood samples. The most recent set of soil sampling data found that there was still some lead contamination in the trailer park. Some sampling results found levels above 400 ppm. Living in an area where levels are above 400 ppm is considered dangerous to a person's health. Therefore, based on USEPA's

guidance, SCDHEC has elected to remove all the surface soils not addressed in USEPA's 1994 removal. SCDHEC will remove all surface soils, called surficial soils, to a minimal level of 6 inches and may remove additional soils, if necessary.

OTHER INFORMATION:

For additional information, please call Scott Wilson, Project Manager, at (803) 896-1077; Karen Sprayberry, Program Coordinator, at (803) 896-4252; or Charles Bristow, Appalachia II District Office at (864) 241-1090.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 25 1999

COPY

Mr. Harry Mathis
Bureau of Solid and Hazardous Waste
South Carolina Department of Health
& Environmental Control
2600 Bull Street
Columbia, SC 29201

SUBJ: Westgate Mobile Home Park Site; Greer, South Carolina

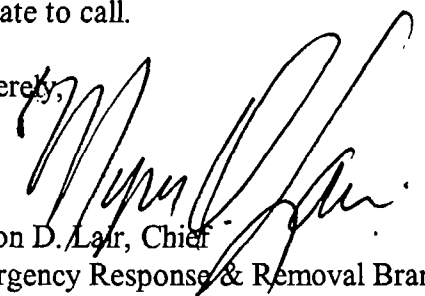
Harry
Dear Mr. Mathis:

In a letter to me from Gary Stewart dated February 8, 1999, South Carolina DHEC referred the Westgate Mobile Home Park Site (the Site) to the EPA Region Emergency Response and Removal Branch (ERRB) as a Superfund removal action candidate. In response to this referral, ERRB conducted a Removal Site Evaluation and determined that the Site warrants a removal action pursuant to the National Contingency Plan because of lead contamination of surface soil in a residential setting. This determination was reported to SCDHEC in a letter from me to you dated May 10, 1999.

In preparation for the removal action, a meeting was held with a PRP for the Site, Exide Corporation, on May 14, 1999. At this meeting, Exide expressed willingness to conduct a removal action at the Site under an Administrative Order on Consent. However, Exide requested that they be allowed time (approximately four weeks) to collect site-specific indoor dust and tap water data. This site-specific data would be used in the Integrated Exposure Uptake Biokinetic (IEUBK) model to generate a site-specific soil removal action level for lead. Because Exide's proposed approach was consistent with EPA guidance on establishing soil lead removal action levels entitled "Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities" (OSWER Directive 9355.4-12), EPA agreed, pending SCDHEC concurrence, to adopt Exide's proposed approach.

On May 17, 1999, EPA and SCDHEC held a conference call to discuss Exide's proposal. After EPA explained Exide's proposal, SCDHEC informed us of their preference to use default parameters for indoor dust and tap water in the IEUBK model which results in a soil action level of 400 mg/kg lead. Therefore, it is EPA's understanding that SCDHEC is withdrawing the referral and will take the lead role in addressing the soil contamination at the Site. EPA respects your decision and appreciates the opportunity to work with you on the Site. If the situation changes and you require our assistance, please don't hesitate to call.

Sincerely,



Myron D. Lair, Chief
Emergency Response & Removal Branch

cc: Ari D. Levine, Exide Corp.
Neal S. Lebo, Exide Corp.
Reuben Bussey, OLS/EAD
Mike Norman, NSMB

5 scenarios - IEUBK

calculated risk-based soil Pb
based on varying dust &/or
dr. water Pb

Kevin
Koporec

Risk Ofc

done about
5/17/99

	if Dust Pb ppm	& if dr Pb ppb	then soil Pb ppm
①	290 (MSA)	4 (default)	355 → 400 355
②	100	4 (default)	550
③	250	8	300
④	307 (MSA)	2	~400
⑤	220 (MSA)	14	~300
<p>• MSA = Multi Source Analysis (i.e., model calc dust Pb)</p> <p>• dr Pb - think about how many spl (over 4 quarters?) needed</p>			

ROUTINE

Exide Battery/Westgate Trailer Park
Meeting with Exide officials - 5/14/99 10 AM

- ◆ Introductions (and cards)
- ◆ Reuben presented updated "Demand" Ltr.
- ◆ Mr. Levine went through how we got here...
 - 1. 500 vs. 400 ppm... Exide wasn't trying to do their own risk assessment.
What was the nature of DHEC's discussion with EPA on this.
 - 2. Exide is involved (in this way) on 74 sites nationwide.
- ◆ Discussion of why modelling hasn't been done before now...
- ◆ (EPA staff only) Discussion of ideas....

Penalty payment ✓ still can do

◆ we plan to get back to them

- EPA discussion -
nature



2600 Bull Street
Columbia, SC 29201-1708 March 17, 1999

Mr. Leo Francendese
Emergency Response and Removal Branch
US EPA, Region IV
61 Forsyth Street
Atlanta, Georgia 30303-3104

Subject : Westgate Trailer Park
Greer, South Carolina

Dear Mr. Francendese :

During a phone conversation which I had today with Ralph Howard of EPA Region IV, he indicated to me that you would be the contact for any future actions undertaken by EPA at the Westgate Trailer Park (Westgate). At his request, I have included a copy of the January 1997 Remedial Investigation for Westgate. It contains the surficial soil sampling data on which the original remedial plan for Westgate was based upon. The only other known surface soil data collected at the site (other than the 1994 EPA removal grid) was compiled by NEIC and reported to EPA Region IV last fall.

Copies of all correspondence between SC DHEC and Exide should be found in the Westgate files of EPA Region IV. However, should require any additional information from the Department, please feel free to contact me at (803) 896-4077. I look forward to hearing from you soon regarding this matter.

Sincerely,

R. Scott Wilson, Project Manager
Division of Site Assessment and Remediation
Bureau of Land and Waste Management

cc : Addie Somers, BLWM
51290; File

enclosure;

Greer's Westgate may have to get more lead out

By Jenny Munro

GREER BUREAU

GREER — Four years after authorities hauled away lead-contaminated dirt from Westgate Mobile Home Park, state officials said more needs to be removed, but they are unsure whether the state or federal government will oversee the work.

"The limited work we did in the past may not have resolved the problem," said Don Rigger, section chief with the federal Environmental Protection Agency's removal operations section. The initial cleanup removed dirt from areas with high lead concentrations, but not from the entire mobile-home park.

The park on Chick Springs Road is adjacent to a closed plant where Exide Corp. manufactured automobile batteries.

"I feel they ought to have done it right the first time," said Timothy Robinson, who has lived in Westgate for about 10 years. "We haven't heard anything about digging it up again."

He said his son, who will soon turn 7, has elevated levels of lead in his blood. "It's

frightening to know your child has been exposed to contamination," he said.

Scott Wilson, site project manager for the state Department of Health and Environmental Control, said the agency "has no indications that an immediate health hazard exists" at the site.

Initial tests of children's blood for lead indicated that 15 had elevated levels, officials said. The latest round of tests, however, showed levels have been dropping, Wilson said.

That indicates that children in the mobile-home park don't appear to be exposed to the high levels of lead contamination, he said.

Medical experts say that young children are particularly vulnerable to lead contamination, which can interfere with brain development and cause learning disabilities.

The EPA's Rigger said a project manager is reviewing available information to see whether the trailer park is a candidate for federal Superfund emergency cleanup. "It's very preliminary," he said.

A decision could be made in

two weeks if enough data is available, Rigger said. Officials could decide that no action is needed; that action should be taken because the site presents an imminent danger; or that additional sampling is needed to determine whether a hazard exists.

If additional soil removal is needed, officials must figure out how to ensure that they get all the lead, Rigger said. One possibility is having all the topsoil in the park removed.

"Hot spots" of lead contamination with levels of up to 2,110 parts per million spurred the initial cleanup. Contaminated soil was removed to clean the areas to a level of 500 parts per million, a level then thought to be safe for residential areas. More recent tests have turned up areas with lead levels of up to 1,600 parts per million, officials said.

New health-hazard information indicates a safe level in residential areas is 400 parts per million, Wilson said.

Negotiations with Exide to clean up the site have broken down, he said.



2600 Bull Street
Columbia, SC 29201-1708

February 8, 1999

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Mark B. Kent

Cyndi C. Mosteller

Brian K. Smith

Rodney L. Grandy

Mr. Myron D. Lair, Chief,
Emergency Response and Removal Branch
US EPA, Region IV
61 Forsyth Street
Atlanta, Georgia 30303-3104

RE : ERRB Referral
Westgate Trailer Park/Exide Battery Site
Greenville County, South Carolina

Dear Mr. Lair:

The purpose of this letter is to request that EPA Region IV's Emergency Response and Removal Branch consider conducting a soil removal at the Westgate Trailer Park (Westgate) located adjacent to the former Exide Battery facility in Greer, South Carolina. The Department has determined that an additional removal action is warranted based on sampling results conducted since the 1994 removal action that indicate significant contamination remains on the Westgate property. In addition, children residing on this property have previously been documented as having elevated blood lead levels.

The Department has made every reasonable attempt to allow Exide to address Westgate under a 1996 consent agreement, however, Exide has been unwilling to accept the Department's cleanup standard of 400 ppm total lead. EPA risk assessor Kevin Koporec has supported the Department's cleanup goal and recommended that surface soil containing lead concentrations greater than 400 ppm be removed (see attachment). Exide's latest correspondence indicates a desire to further negotiate the cleanup goal. The Department feels that negotiations with Exide have been exhausted and that this removal action could best be accomplished by EPA.

The Department would like to thank you for considering this request. We ask that you respond to our request as soon as possible. In addition, if EPA chooses to take action at the site, it is requested that all activities be closely coordinated with the Department. If you have any questions regarding this matter, please call me at (803) 896-4054, or Scott Wilson, the State Project Manager, at (803) 896-4077.

Sincerely,

R. Gary Stewart, P.E., Manager
Site Engineering Section
Bureau of Land and Waste Management

cc : Keith Lindler
Scott Wilson
Jessie King
Charles Bristow
Ralph Howard, EPA Region IV
File 051290

To: Ralph Howard
Fax #: 404-56²-8788
Re: ERRB Referral
Date: February 9, 1999
Pages 5, including this cover sheet.

**FACSI
MILE**

- Copied to Warren Dixon...

1. Dan Lamente - Shillings Salvage

Call 415/733-2801 x 317

~~2. 415/577-0022~~

29580

From the desk of...

Norma Jean West
Administrative Assistant
SC DHEC
8901 Farrow Road
Columbia, S.C. 29223

(803) 896-4061
Fax: (803) 896-4292



2600 Bull Street
Columbia, SC 29201-1708

February 8, 1999

COMMISSIONER:
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Cyndi C. Mosteller

Brian K. Smith

Rodney L. Grandy

Mr. Myron D. Lair, Chief,
Emergency Response and Removal Branch
US EPA, Region IV
61 Forsyth Street
Atlanta, Georgia 30303-3104

RE: ERRB Referral
Westgate Trailer Park/Exide Battery Site
Greenville County, South Carolina

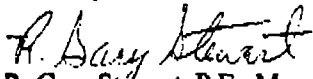
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Sincerely,


R. Gary Stewart, P.E., Manager
Site Engineering Section
Bureau of Land and Waste Management

cc: Keith Lindler
Scott Wilson
Jessie King
Charles Bristow
Ralph Howard, EPA Region IV
File 051290



REGION 4

61 Forsyth Street, S.W.
Atlanta, Georgia 30303

December 1, 1998

4WD-OTS

MEMORANDUM

SUBJECT: Exide Corp. Facility/Westgate Trailer Park
Greer, South Carolina

FROM: Kevin Koporec, Toxicologist
Office of Technical Services **KPK**

TO: Ralph Howard
South Carolina Section
North Site Management Branch

Re: Oct-30-98 letter from Exide Corp. to Reuben Bussey, EPA
Aug-31-98 letter from SCDHEC to Exide Corp.
Jul-27-98 letter from AGS Corp. to SCDHEC

Per your recent request I have evaluated the recent Exide/SCDHEC/EPA correspondence listed above in regard to the assessment of risk from lead in soil at the Exide Corp./Westgate Trailer Park Site.

In the most recent correspondence (Oct-30), Exide has attempted to apply the recently proposed TSCA Section 403 rule (FR Jun-3-98) to the Westgate site. Due to the reasons outlined below, the soil hazard level given in the proposed TSCA rule should not be used as a remedial level at OSWER (CERCLA & RCRA) sites.

The specifics for the TSCA 403 standard are proposed and not final at this time. Thus the final TSCA 403 rule could be significantly different after consideration of public comment and analysis. Additionally, when the TSCA proposed rule becomes final (date not determined), it would likely not apply, i.e., not become an ARAR, for CERCLA site remedial action due to the different purposes of the Title X/TSCA and CERCLA programs. Some of the major differences in the proposed TSCA rule and CERCLA relative to soil lead are stated below.

The Title X/TSCA 403 proposed rule recommends interim control/exposure reduction measures for soil lead levels in the range of 400 to 2000 mg/kg, but it is voluntarily up to the homeowner to implement these recommended measures. In contrast, at CERCLA Sites,

site-specific information is used to adjust soil lead levels upwards from 400 mg/kg to support the OSWER soil lead directive (EPA Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, OSWER Directive # 9355.4-12, Jul-14-1994). Given that EPA's responsibility is to provide for a determination that the remediation of CERCLA sites will be permanently protective and that there can be no guarantees that interim controls will be maintained to protect health, the OSWER soil lead directive and related materials (such as the EPA IEUBK Model) must be used to evaluate CERCLA Sites.

As noted above, 400 ppm is the screening level for lead in soil at CERCLA sites. This is based on the EPA Integrated Exposure Uptake and Biokinetic (IEUBK) model run with model defaults for all exposure parameters other than soil and dust lead concentrations. The final remediation soil lead level for a hazardous waste site should be determined by running the IEUBK with site-specific inputs, where available, for the various input parameters. SCDHEC has followed EPA in using 400 ppm as a remedial level for lead in soil at current or future residential sites lacking site-specific data for other input parameters. If no site data are available or if the available site data do not differ significantly from the default values, the final soil lead remedial level will be 400 ppm.

The only site concentration data made available to me for the Exide/Westgate site (other than soil data) are for air lead levels (AGS Jul-27-98 letter to S. Wilson, SCDHEC). The average of the data points is $0.052 \mu\text{g}/\text{cu.m.}$ lead in air. This air lead concentration does not alter the soil lead level (400 ppm) necessary to meet the EPA goal of no greater than 5% probability of exceeding the health based blood lead level of $10 \mu\text{g}/\text{dL}$. No site dust concentration data (mass per mass units) are presented in the report; therefore, the dust lead concentration is determined by the IEUBK model which assumes dust to come from air and outdoor soil. With a soil lead concentration of 370 ppm and an air lead concentration of $0.052 \mu\text{g}/\text{cu.m.}$, the resultant dust lead concentration predicted by the model is 264 ppm.

Additionally, AGS, in their Jul-27-98 letter to SCDHEC, proposes a soil lead cleanup level of 520 ppm. This value is derived by altering, without proper site data, the default value in the EPA IEUBK model for the dust-lead-to-soil-lead ratio. The default value for this parameter is 0.7; AGS derives a ratio of 0.25 based on a *qualitative* comparison with the HUD clearance levels for household dust. The information presented is not valid to change the default ratio of 0.7 for this parameter. Site data for dust lead concentrations (mass/mass units) are needed to calculate a site-specific dust-lead-to-soil-lead ratio. From the information presented there is no basis to alter the default ratio of 0.7; therefore, the soil lead concentration needed to protect human health is 400 ppm lead in soil.

Based on the above discussion and the knowledge that children in this community have been documented as having elevated blood lead levels, I recommend that surface soil containing elevated lead concentrations (greater than 400 ppm) be removed, or that other measures be taken to assuredly eliminate the exposure pathway.

If further questions arise, I can be reached at 2-8644.

cc: **Reuben Bussey, EAD**
Billy Bright, Cost Recovery Section
Elmer Akin, OTS

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS, AND TRAINING
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
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January 28, 1999

MEMORANDUM

SUBJECT: Executive Summary of Initial Lead and Antimony Results
Westgate Trailer Park
Greer, South Carolina
Project No. VP0300 (R55)

FROM: Diana A. Love, Esq.
Director, NEIC

TO: Reuben Bussey
Assistant Regional Council
CERCLA and Legal Support

*not a waste
document
NEIC & EAD*

Attached is an executive summary for the subject case. If there are any questions, please contact Dr. Steve Machemer at (303) 236-6093.

Attachment

cc: Billy Bright, Enforcement Project Manager, Region 4
Floyd Ledbetter, Region 4
Bruce Miller, Associate Director for Technical Support, Region 4
Sherri Fields, Enforcement Coordinator, Region 4
Phillis Harris, Director Environmental Accountability Division, Region 4
G. Lubieniecki, Civil Program Coordinator
K.E. Nottingham, Chief, Laboratory Branch
S. Machemer, Project Leader, Laboratory Branch

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement and Compliance Assurance
Office of Criminal Enforcement, Forensics and Training

EXECUTIVE SUMMARY

Executive Summary of Initial Lead and Antimony Results
Westgate Trailer Park
Greer, South Carolina
Project No. VP0300 (R55)

January 28, 1999

Steve Machemer, Ph.D.
Project Leader

NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
Diana A. Love, Director
Denver, Colorado

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Executive Summary of Initial Lead and Antimony Results
for the Westgate Trailer Park
Greer, South Carolina
Project No. VP0300 (R55)

Introduction

In cooperation with the United States Environmental Protection Agency (EPA) Region 4 and the South Carolina Department of Health and Environmental Control (DHEC), EPA's National Enforcement Investigations Center (NEIC) collected eighty soil cores from the Westgate Trailer Park in Greer, South Carolina. An additional twelve soil cores and eighteen samples of dust and process materials were collected from the battery manufacturing facility immediately west of the trailer park. Analysis of these samples is currently being conducted by NEIC to determine the source of lead contamination found in the soil of the Westgate Trailer Park. This report provides a brief summary of the initial results of the lead and antimony analyses of the soil cores from the trailer park and soil cores and samples of dust and process materials from the battery manufacturing facility.

Sample Analysis

Soil cores and samples of dust and process materials were analyzed for total lead concentration as well as other total metal concentrations including antimony. Lead was analyzed by inductively coupled plasma-mass spectrometry (ICP-MS) on nitric acid or hydrochloric acid digestions as the primary analytical technique. For confirmation, lead was also analyzed by inductively coupled plasma-atomic emission spectroscopy (ICP-AES) on potassium hydroxide fusions. Antimony was analyzed by inductively coupled

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plasma-mass spectrometry (ICP-MS) on hydrochloric acid digestions.
Antimony results were confirmed by inductively coupled plasma-atomic
emission spectroscopy (ICP-AES) on hydride generation of hydrochloric acid
digestions.

Results and Conclusions

The correlation coefficient (r^2) of lead and antimony in eighty samples of soil from the Westgate Trailer Park was approximately 0.88. This correlation coefficient indicates a strong relationship between lead and antimony in the trailer park soil. The relationship shows that lead-antimony alloy material is a primary source of the lead in the soil at the trailer park. In addition, ratios of lead to antimony in the trailer park soil are consistent with ratios of lead to antimony in samples from the battery manufacturing facility. Battery manufacturing typically uses lead-antimony alloys in their manufacturing process. Furthermore, the relationship of lead and antimony in these results are not consistent with other probable sources of lead in the trailer park, such as lead from automobile exhaust.

Work in Progress

Currently underway at NEIC are several additional sets of analyses which are likely to provide additional information pertaining to the source of lead in the soil at the Westgate Trailer Park.



1-28-99



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JAN 13 1999

Mr. Ari D. Levine
Assistant General Counsel
Exide Corporation
645 Penn Street
Reading, PA 19601

SUBJ: Westgate Trailer Park Site
Greer, South Carolina

Dear Mr. Levine:

I have discussed the issues raised in your letter of October 30, 1998 with representatives of the Region 4 Superfund remedial program, and offer the following response to your concerns:

The proposed Toxic Substances Control Act (TSCA) Section 403 regulations (63 Fed. Reg. 30,302 et seq.) do not require soil-lead cleanup at any hazard level. The essential purposes of the regulations are: (1) to identify a soil-lead level of concern of 400 ppm and a hazard level of 2000 ppm, and to see that the risk levels, found to exist on any particular property, are effectively communicated to the public; and (2) to implement key provisions of the Residential Lead-Based Paint Hazard Reduction Act of 1992, none of which remotely approaches cleanup action.

The Overview of the proposed regulations candidly states that the regulations would not require private property owners to undertake hazard control actions when hazards are identified. Concern for children's health, liability exposure and other market forces are expected to provide incentive for property owners to take action voluntarily.

CERCLA takes a more aggressive approach toward environmental contamination, including soil-lead contamination. Section 104 of CERCLA provides for the investigation, removal and remediation of such contamination.

The enclosed memorandum from Kevin Koporec of the Region 4 Office of Technical Services explains how EPA arrives at site-specific soil-lead cleanup standards at Superfund sites, for which EPA is charged with responsibility for cleanup.

Upon consideration and comparison of the basic objectives of the Superfund program with the stated purposes of the proposed

TSCA Section 403 regulations, it does not appear that the latter reasonably apply to the determination of a cleanup standard for the Westgate Trailer Park Site. It seems reasonable to conclude that risk levels, established for cleanup under CERCLA, are the more appropriate standard for contaminant remediation than are risk and hazard standards, triggering notice to the public as to the existence of such risks. EPA clearly does not have the intention, in the proposed TSCA Section 403 regulations, of setting soil-lead cleanup standards for Superfund sites.

The enclosed Region 4 Office of Technical Services memorandum essentially so states.

I must leave to the State of South Carolina any discussion as to whether or not it has misinterpreted or misapplied the proposed regulations.

EPA has designated Westgate a "low priority site," largely because the State of South Carolina is the lead agency and Exide has indicated a willingness to cleanup the contamination. If Exide elects not to proceed with cleanup as required by the State, EPA will reconsider its plans for response action at the Site.

If you wish to discuss this matter in person, I will be glad to arrange a meeting, in Atlanta, of all appropriate EPA representatives.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Reuben T. Bussey', written over the word 'Sincerely,'.

Reuben T. Bussey

Enclosure

cc: Kevin Koporec
Ralph Howard



2600 Bull Street
Columbia, SC 29201-1708

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CERTIFIED MAIL

December 18, 1998

Mr. Neil S. Lebo
Exide Corporation
P.O. Box 14205
Reading, PA 19612-4205

RE: Implementation of Soil Remediation Plan
Westgate Trailer Park
Greenville County, South Carolina

Dear Mr. Lebo:

The South Carolina Department of Health and Environmental Control (Department) was recently copied on a December 1, 1998 memorandum from Kevin Koporec of EPA Region 4 regarding the remediation of lead contaminated soils at the Westgate Trailer Park (Westgate) located in Greer, South Carolina. The content of that memorandum concurred with previous Departmental recommendations on using 400 ppm as the clean-up level for Westgate. The Department feels that all reasonable arguments by Exide regarding the clean-up level have been exhausted at this point. We are therefore requesting that Exide submit to the Department a plan and schedule for implementation of soil remediation at Westgate within twenty (20) business days of the receipt of this letter. The corresponding implementation of the remedial plan should be scheduled no later than thirty (30) days of the approval of the submitted plan.

Although Exide submitted an original remediation plan for Westgate on July 16, 1997, the Department believes a revised plan is warranted. Specifically, there is concern that the areas of delineation found in Figure 3 of the original plan are not complete. With the exception of the northeast portion of the trailer park where the EPA removal was conducted, the Department believes that a surficial removal of all soils could be warranted. The variations in lead concentrations over short distances make it difficult to distinguish areas of concentration under 400 ppm with any certainty. With this in mind, the plan for excavation and confirmatory sampling would also need to be revised from the original remediation plan submittal. Finally, the implementation schedule would require revision due to the updated time frames for the remedial action at Westgate.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 4

61 Forsyth Street, S.W.
Atlanta, Georgia 30303

December 1, 1998

4WD-OTS

MEMORANDUM

SUBJECT: Exide Corp. Facility/Westgate Trailer Park
Greer, South Carolina

FROM: Kevin Koporec, Toxicologist
Office of Technical Services **KPK**

TO: Ralph Howard
South Carolina Section
North Site Management Branch

Re: Oct-30-98 letter from Exide Corp. to Reuben Bussey, EPA
Aug-31-98 letter from SCDHEC to Exide Corp.
Jul-27-98 letter from AGS Corp. to SCDHEC

Per your recent request I have evaluated the recent Exide/SCDHEC/EPA correspondence listed above in regard to the assessment of risk from lead in soil at the Exide Corp./Westgate Trailer Park Site.

In the most recent correspondence (Oct-30), Exide has attempted to apply the recently proposed TSCA Section 403 rule (FR Jun-3-98) to the Westgate site. Due to the reasons outlined below, the soil hazard level given in the proposed TSCA rule should not be used as a remedial level at OSWER (CERCLA & RCRA) sites.

The specifics for the TSCA 403 standard are proposed and not final at this time. Thus the final TSCA 403 rule could be significantly different after consideration of public comment and analysis. Additionally, when the TSCA proposed rule becomes final (date not determined), it would likely not apply, i.e., not become an ARAR, for CERCLA site remedial action due to the different purposes of the Title X/TSCA and CERCLA programs. Some of the major differences in the proposed TSCA rule and CERCLA relative to soil lead are stated below.

The Title X/TSCA 403 proposed rule recommends interim control/exposure reduction measures for soil lead levels in the range of 400 to 2000 mg/kg, but it is voluntarily up to the homeowner to implement these recommended measures. In contrast, at CERCLA Sites,

site-specific information is used to adjust soil lead levels upwards from 400 mg/kg to support the OSWER soil lead directive (EPA Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, OSWER Directive # 9355.4-12, Jul-14-1994). Given that EPA's responsibility is to provide for a determination that the remediation of CERCLA sites will be permanently protective and that there can be no guarantees that interim controls will be maintained to protect health, the OSWER soil lead directive and related materials (such as the EPA IEUBK Model) must be used to evaluate CERCLA Sites.

As noted above, 400 ppm is the screening level for lead in soil at CERCLA sites. This is based on the EPA Integrated Exposure Uptake and Biokinetic (IEUBK) model run with model defaults for all exposure parameters other than soil and dust lead concentrations. The final remediation soil lead level for a hazardous waste site should be determined by running the IEUBK with site-specific inputs, where available, for the various input parameters. SCDHEC has followed EPA in using 400 ppm as a remedial level for lead in soil at current or future residential sites lacking site-specific data for other input parameters. If no site data are available or if the available site data do not differ significantly from the default values, the final soil lead remedial level will be 400 ppm.

The only site concentration data made available to me for the Exide/Westgate site (other than soil data) are for air lead levels (AGS Jul-27-98 letter to S.Wilson, SCDHEC). The average of the data points is $0.052 \mu\text{g}/\text{cu.m.}$ lead in air. This air lead concentration does not alter the soil lead level (400 ppm) necessary to meet the EPA goal of no greater than 5% probability of exceeding the health based blood lead level of $10 \mu\text{g}/\text{dL}$. No site dust concentration data (mass per mass units) are presented in the report; therefore, the dust lead concentration is determined by the IEUBK model which assumes dust to come from air and outdoor soil. With a soil lead concentration of 370 ppm and an air lead concentration of $0.052 \mu\text{g}/\text{cu.m.}$, the resultant dust lead concentration predicted by the model is 264 ppm.

Additionally, AGS, in their Jul-27-98 letter to SCDHEC, proposes a soil lead cleanup level of 520 ppm. This value is derived by altering, without proper site data, the default value in the EPA IEUBK model for the dust-lead-to-soil-lead ratio. The default value for this parameter is 0.7; AGS derives a ratio of 0.25 based on a *qualitative* comparison with the HUD clearance levels for household dust. The information presented is not valid to change the default ratio of 0.7 for this parameter. Site data for dust lead concentrations (mass/mass units) are needed to calculate a site-specific dust-lead-to-soil-lead ratio. From the information presented there is no basis to alter the default ratio of 0.7; therefore, the soil lead concentration needed to protect human health is 400 ppm lead in soil.

Based on the above discussion and the knowledge that children in this community have been documented as having elevated blood lead levels, I recommend that surface soil containing elevated lead concentrations (greater than 400 ppm) be removed, or that other measures be taken to assuredly eliminate the exposure pathway.

If further questions arise, I can be reached at 2-8644.

cc: Reuben Bussey, EAD
Billy Bright, Cost Recovery Section
Elmer Akin, OTS

Author: Ralph Howard at REGION4

Date: 11/5/1998 10:05 AM

Priority: Normal

TO: Reuben Bussey

CC: Cynthia Peurifoy, Elmer Akin, Kevin Koporec, Ralph Howard, Floyd Ledbetter, Michael Norman

Subject: Re: EXIDE BATTERY / WESTGATE TRAILER PARK

~~ATTORNEY/CLIENT PRIVILEGE~~ FOIA EXEMPT

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EXIDE BATTERY / WESTGATE TRAILER HOMES
GREER, GREENVILLE CO. SC

Reuben, I've not read the Fed Register quote yet... The Site's been NFRAPed; however, since NEIC/Denver is doing an Air Transport Study (and is almost done by the way) Cost Recovery considers their SOL open, as I understand it from Ray Strickland. The site was NFRAPed by us after a 1995 Removal Action by EERB, of surface soils; the State negotiated for some time and then signed an Order with Exide in early 1996 (approx). An RI/FS-type thing was done beginning in mid-1996 on through mid-1997. The order did require remediation. Data on hand as of 11/96 showed that despite the Removal, there were still areas of high Pb (Pb = lead) still present in surface soils. A plan for remediation was generated in July 1997.

As to why they're blaming us for the Pb level, that's ridiculous. SCDHEC is electing NOT to accept a higher cleanup number, preferring the 400 ppm level as we do, and is basing their decision on our Risk Office's policy. An additional factor is that Dr. Bob Marino of DHEC's Health Hazard group has overseen blood-lead sampling for long periods of time here; AND, there have been *ACTUAL* significantly-elevated blood-levels here, not just potential but ACTUAL. 400 ppm generates an immediate removal as far as we're concerned, for surface soils in a residential area (this is a trailer park).

Exide simply doesn't want to do it to 400, they want 500. They want to use modelling to show 500 is OK (this, in spite of the documented elevated blood-Pb levels seen in the past). I'll defer to the risk experts but I don't see that as defensible. The difference in soil volume will be significant (but not outrageous), as there are about 20+% of the samples in between 400 and 500 ppm. DHEC has told them that EPA will do a removal if they don't take care of it. All DHEC is requiring is a surface soil removal to the same standard we would. You can draw your own conclusions as to why Exide won't do this.

I've coordinated with Mike Norman in EERB about this; we fully intend to address it if they won't. Exide has dragged, delayed, complained, etc. for about 1-1/2 years here and DHEC is ready for them to get it done, without more delays. There is considerable local interest and news coverage, as well as active litigation in progress (a class-action of former Exide plant workers is the one I'm aware of). I myself have been pushing DHEC for a long time to get on with it; I was the one who initiated the air study which will (presumably) tie the plant to the trailer park. (In spite of the simple obviousness of it, the company has maintained to DHEC for years that they're not responsible for the lead in the trailer park; yet they had air violations for Pb in the past.) In 23 samples by SESD in 6/97, Pb levels in the park go as high as 1300 ppm (this is *after* the 1995 EPA removal). In 80 samples NEIC took (w/ SESD assistance, at about that same time), the AVERAGE hit was 812 ppm lead, with a max of 2760 ppm (THIS DATA NOT YET RELEASABLE but is QA/QC'd). This is unacceptable, period.

Unless Elmer Akin or Mike Norman suggest another course of action based on this message, we intend to follow through with a Removal Action if Exide won't get on with it. Exide needs to *get the lead out* so to speak. If you do a response, you can convey this as what the program is going to do.

With your permission I'd like to forward this message to Scott Wilson, the DHEC Project Manager; I see no reason he couldn't be made aware of their letter.

Reply Separator

Subject: westgate

Author: Reuben Bussey at REGION4

Date: 11/4/1998 6:14 PM

Ralph, I checked CERCLIS and didn't find Westgate on either the list of sites or on the No Further Action list. Please let me know if the site's been NFRAPed or otherwise handed over to the state.

I've also received a letter from Exide complaining that the State is requiring a lead cleanup level of 400 ppm (residential), and claiming that the number is an EPA requirement. Exide correctly points out that the state has a right to require a higher standard of cleanup, if that's the state's preference. Exide believes, however, that DEHEC has misinterpreted EPA notice given by 63 Fed. Reg. 30,302 at 30,338

(June 3, 1998).

What do you think?

Exp 5
But -
Bottom message
releasable



2600 Bull Street
Columbia, SC 29201-1708

CERTIFIED MAIL

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August 31, 1998

Mr. Neil S. Lebo
Exide Corporation
P.O. Box 14205
Reading, PA 19612-4205

RE: Westgate Trailer Park Response Action
Greenville County, South Carolina

Dear Mr. Lebo:

On July 28, 1998 the South Carolina Department of Health and Environmental Control (Department) received a report on Exide's behalf from Advanced Geoservices Corp. (AGC) regarding lead modeling at the Westgate Trailer Park (Westgate). The Department completed its review of the modeling on August 13, 1998 and forwarded the report to the EPA Region 4 office for their review. The EPA screening of the report was completed on August 26, 1998 and a subsequent conference call between the Department and EPA yielded several issues regarding the proposed removal level of lead at Westgate. These issues include a perceived discrepancy with the modeling itself, as well as concerns which exist on a programmatic level.

In regards to the IEUBK model conducted by AGC using site specific data for Westgate which had been previously gathered by the Department, the majority of the report was acceptable. However, the parameter input value for lead in soil and dust did trigger some concern from both Departmental and EPA risk assessors who reviewed the report. It was their opinion that no correlation between Westgate and the other two referenced sites which AGC had worked on existed. Therefore, the default ratio of 0.70 for indoor dust levels based on outdoor concentrations should have been used instead of the 0.25 value used in the report. Use of the default value would have resulted in a target lead soil value of approximately 370 ppm instead of the 520 ppm value generated in the report.

*Discussed with Mike
Norman 9-8-98*

In addition to the above mentioned discrepancy in the modeling, both the Department and EPA are concerned on the potential precedent which the removal at Westgate may set. In a lead from EPA Region 4, the Department has adopted a residential level of 400 ppm for response actions to lead contaminated soils at state sites. If sufficient site-specific lead data does not exist to support an alternative removal level, then 400 ppm will be the default value. EPA has therefore conveyed to the Department that if Exide is unwilling to proceed with a removal of lead contaminated soils at Westgate to a level of 400 ppm, they will proceed with the response action themselves.

The Department is therefore requesting that a revised workplan be submitted within twenty days of the receipt of this letter. This workplan need not be as detailed and comprehensive as the plan submitted in July 1997, but should include mapped area of removal, a confirmatory sampling plan, the name of the contractor and sub-contractors who will carry out the work, and a schedule of implementation. If you feel there is a need for additional discussion on this matter, EPA has agreed to participate in an in-person meeting if one can be scheduled in a reasonable time frame. If the Department does not hear from you within several days of receiving this letter, we will assume you are proceeding with the workplan and implementation of the response action and that no meeting is necessary.

If you have any questions or concerns on this matter, please contact me at (803) 896-4077.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Scott Wilson". The signature is stylized with a large, looped "R" and a cursive "Wilson".

R. Scott Wilson, Project Manager
Division of Site Assessment and Remediation
Bureau of Land and Waste Management

cc: Ralph Howard, EPA Region 4
R. Gary Stewart, BLWM
Charles Bristow, AppII District Office

May 15, 1998

MEMORANDUM

SUBJECT: Initial Soil Lead Results for the Westgate Trailer Park, Greer, South
Carolina, Draft Report
Westgate Trailer Park
Greer, SC
Project No. R55, VP0300

FROM: Diana A. Love, Esq.
Director, NEIC

TO: Bruce Miller
Associate Director for Technical Support
EPA - Region 4, Atlanta, Georgia

Attached is a report for the subject case. If there are any questions, please
contact Steve Machemer at (303) 236-5132, extension 287.

Attachment

cc: Floyd Ledbetter
Sherri Fields

FOIA
Ex. 5 & 7

Not EPA Documents
NEIC docs &
Air Division
2 copies of same
document

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement and Compliance Assurance
Office of Criminal Enforcement, Forensics and Training

ANALYTICAL RESULTS

Initial Soil Lead Results for the Westgate Trailer Park
Draft Report
Greer, South Carolina
Project No. R55,VP0300

MAY 15, 1998

Steve Machemer
Project Leader

NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
Diana A. Love, Director
Denver, Colorado

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Initial Soil Lead Results for the Westgate Trailer Park
Draft Report
Greer, South Carolina
Project No. R55,VP0300

Introduction

At the request of EPA Region 4, NEIC conducted sampling and subsequent analysis of soil samples from the Westgate Trailer Park in Greer, South Carolina. The objective was to identify the source of lead contamination found in the trailer park soil. As an initial step, soil litter samples from the trailer park were analyzed for total lead concentration. This report provides the initial results of the lead analyses of the soil litter samples from the trailer park.

Sampling

Eighty samples (1A to 20D) of soil litter were subsampled from eighty soil cores taken from various locations in the Westgate Trailer Park on May 12, 1997. Soil cores were collected in polycarbonate core tubes 15 centimeters (6 inches) in length and 5 centimeters (2 inches) in diameter by slide hammer coring devices. Locations of twenty "A" samples (1A to 20A) were chosen based on XRF analyses conducted in the field by EPA-Region 4 personnel. To determine the areal extent and variability of lead concentrations in the soil, "B", "C", and "D" sample locations were chosen randomly relative to "A" samples as described below. This resulted in the collection of twenty sets of 4 samples, "A" through "D" which represented separate areas of soil in the trailer park.

Locations of twenty "B", twenty "C", and twenty "D" samples (1B to 20B, 1C to 20C, and 1D to 20D) were determined relative to "A" samples using a preconstructed template. The template was constructed using computer generated pairs of random numbers. The pairs of random numbers represented randomly selected sample locations for samples "B", "C", and "D" within separate one third areas of the circle with sample "A" at the center and a radius of 1.5 meters (5 feet) (Figure 1a). The configuration of "A", "B", "C", and "D" sample locations are shown in Figure 1a. Obstructions required the distance from sample "A" to each of samples "B", "C", and "D" to be cut in half for sample sets 1, 5, 14 and 15. In this way, 16 sample sets of 4 samples (A to D) represented the lead concentrations in the soil litter over separate areas of 7.3 square meters. For sample sets 1, 5, 14 and 15, the area was 1.8 square meters.

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Sample Preparation

The litter layer material was separated from the mineral soil in the cores and dried to constant weight at 50 degrees Celsius. Litter layer samples were ground using a Spex Shatterbox ring and puck grinding mill. Aliquots of ground samples were prepared for analysis by nitric acid digestions and potassium hydroxide fusions.

Sample Analysis

Lead in the soil litter layer was analyzed by inductively coupled plasma-mass spectrometry (ICP-MS) on nitric acid digestions as the primary analytical technique. For confirmation, lead was also analyzed by inductively coupled plasma-atomic emission spectroscopy (ICP-AES) on potassium hydroxide fusions.

Sample Statistics

Averages, standard deviations, and relative standard deviations were calculated for the entire set of eighty lead analyses and for each set of 4 samples (A to D) representing distinct areas in the trailer park. In addition, two-sided (upper and lower) confidence limits for the mean at 95 percent confidence and three degrees of freedom were calculated for each area represented by sets of 4 samples.

Results

The ICP-MS results of lead concentrations for the soil litter in the trailer park are reported (Table 1a.). ICP-MS and ICP-AES analyses were in good agreement where 69 percent of results were within 10 relative percent difference and 99 percent of results were within 20 relative percent difference. The attached maps (Figure 1b and 1c) display the soil sample locations and lead concentrations for the soil litter layer in Westgate Trailer Park. For all eighty samples collected, lead concentrations average 812 mg/kg and range from 287 to 2760 mg/kg with a relative standard deviation of 63 percent. Large variations in lead concentrations are also found between areas represented by sample sets. For example, lead concentrations in sample set 17A-17D averages 356 mg/kg while lead concentrations in sample set 9A-9D averages 1925 mg/kg, or 5 times as much. These results show a large variability in lead concentrations within the trailer park.

In addition, large variations of lead concentrations occur within areas represented by sample sets. For example, sample set 10A-10D shows variations from 549 to 1310 mg/kg with a relative standard deviation of 49 percent, and sample set 19A-19D shows variations from 287 to 504 mg/kg with a relative standard deviation of

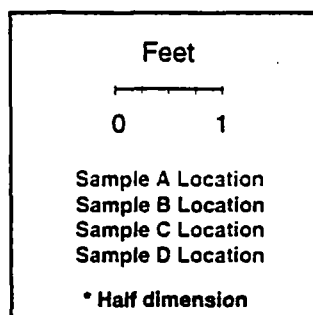
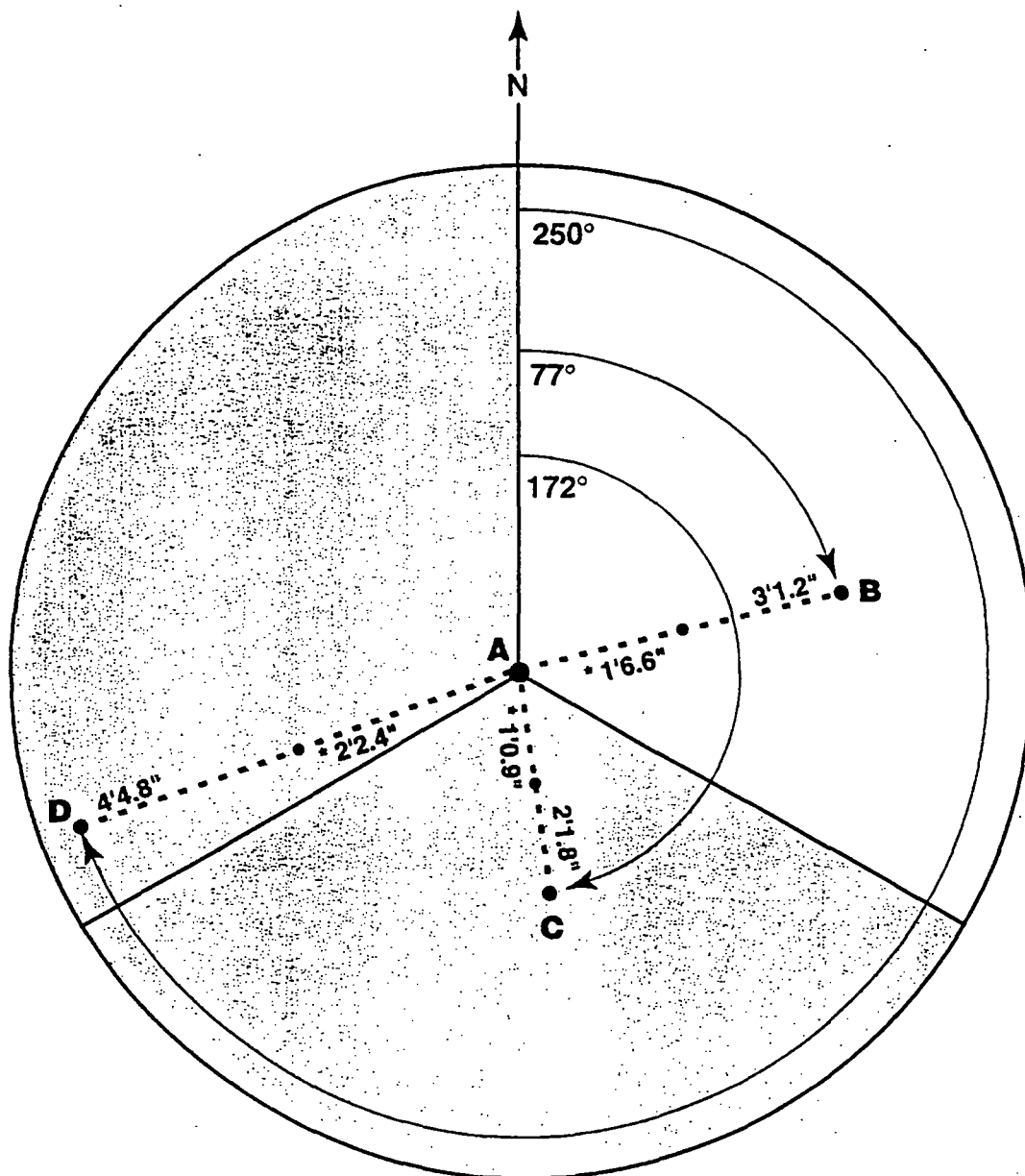
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22 percent. These results indicate a large variability in lead concentrations within areas represented by sample sets.

Upper confidence limits of the mean for areas represented by sets of 4 samples do not reveal any area in the trailer park where the average lead concentration is below 400 mg/kg at 95 percent confidence. In other words, variations in lead concentrations are too great over short distances (less than a meter) to distinguish areas of soil with lead concentrations below 400 mg/kg with any reasonable confidence. Therefore, based on a threshold level of 400 mg/kg, the entire area of the trailer park must be remediated with the possible exception of the northeast area which has previously undergone remediation activity.

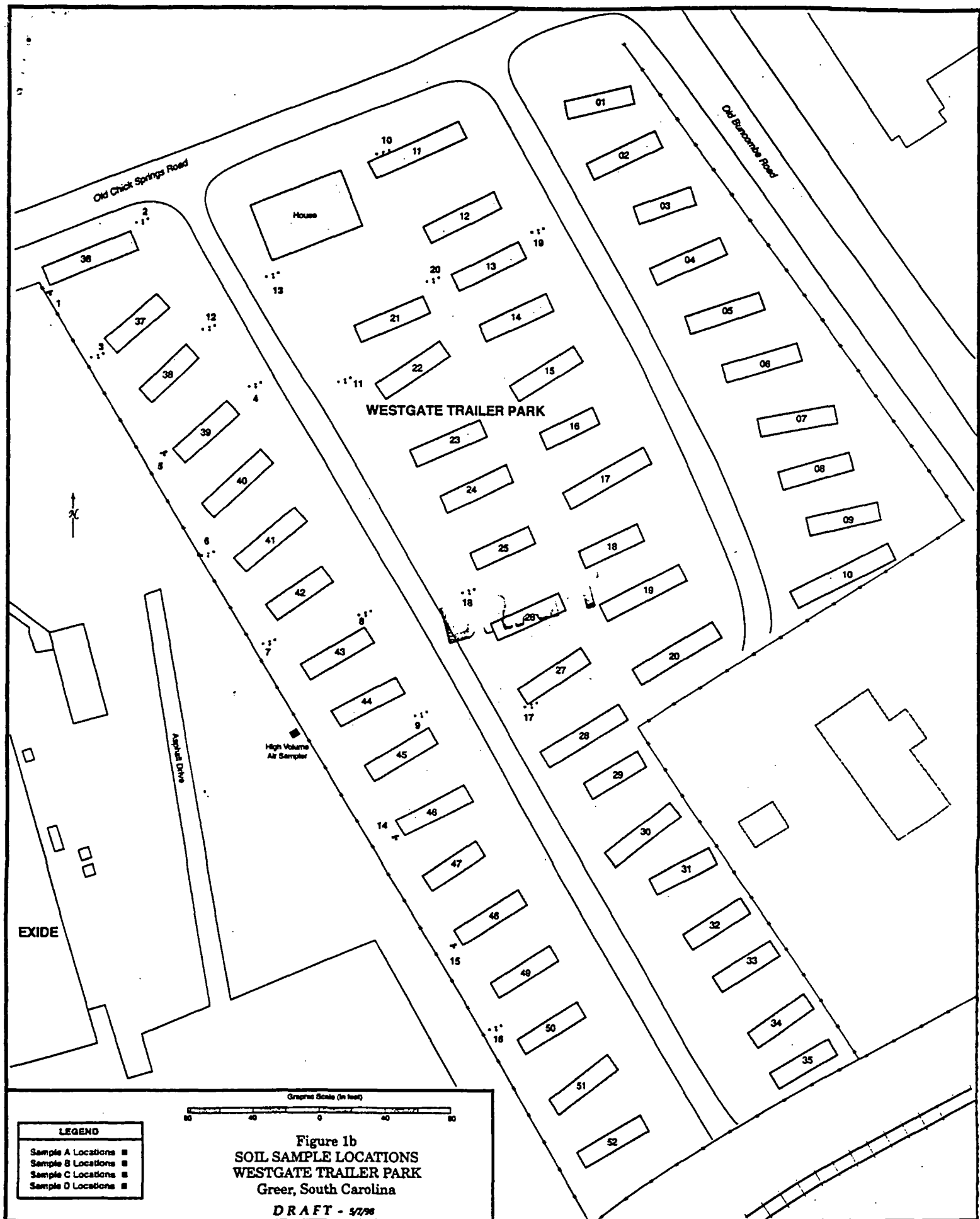
Table 1a. Lead Concentrations in the Westgate Trailer Park soil. Mass spectrometry results.

Sample	Lead (mg/kg)	Sample Set Std Dev	Sample Set Average	Relative Std Dev	LCL of the Mean	UCL of the Mean
001-asa1	983					
001-asb1	1240					
001-asc1	1210					
001-ads1	973	143	1102	0.13	874	1329
002-asa1	801					
002-asb1	561					
002-asc1	869					
002-ads1	836	140	767	0.18	544	989
003-asa1	559					
003-asb1	1100					
003-asc1	978					
003-ads1	834	232	867	0.27	497	1237
004-asa1	1430					
004-asb1	642					
004-asc1	1170					
004-ads1	836	350	1020	0.34	463	1576
005-asa1	1470					
005-asb1	1610					
005-asc1	1340					
005-ads1	2550	550	1743	0.32	868	2817
006-asa1	897					
006-asb1	1050					
006-asc1	645					
006-ads1	819	168	850	0.20	583	1117
007-asa1	620					
007-asb1	625					
007-asc1	686					
007-ads1	718	48	662	0.07	586	738
008-asa1	1210					
008-asb1	2050					
008-asc1	2050					
008-ads1	1390	439	1675	0.26	976	2374
009-asa1	2760					
009-asb1	1610					
009-asc1	1670					
009-ads1	1660	557	1925	0.31	1038	2812
010-asa1	572					
010-asb1	602					
010-asc1	1310					
010-ads1	549	368	758	0.49	172	1344
011-asa1	321					
011-asb1	876					
011-asc1	613					
011-ads1	367	256	544	0.47	138	951
012-asa1	679					
012-asb1	641					
012-asc1	526					
012-ads1	817	120	666	0.18	475	857
013-asa1	836					
013-asb1	474					
013-asc1	693					
013-ads1	669	149	668	0.22	431	905
014-asa1	418					
014-asb1	371					
014-asc1	445					
014-ads1	316	37	388	0.15	297	478
015-asa1	440					
015-asb1	400					
015-asc1	541					
015-ads1	527	68	477	0.14	369	585
016-asa1	466					
016-asb1	512					
016-asc1	301					
016-ads1	480	92	435	0.21	288	581
017-asa1	336					
017-asb1	445					
017-asc1	323					
017-ads1	319	60	356	0.17	260	451
018-asa1	442					
018-asb1	370					
018-asc1	471					
018-ads1	411	43	424	0.10	355	492
019-asa1	504					
019-asb1	287					
019-asc1	423					
019-ads1	418	90	408	0.22	285	551
020-asa1	502					
020-asb1	485					
020-asc1	488					
020-ads1	522	17	499	0.03	472	528
average	812	187	812	0.22	498	1126
minimum	287	17	366	0.03	138	451
maximum	2760	557	1925	0.49	1038	2812
std dev	511	169	469	0.12	281	716
red	0.63	0.86	0.58	0.53	0.52	0.84
median	633	142	667	0.20	468	928



DRAFT

Figure 1a
TEMPLATE DIMENSIONS FOR THE
WESTGATE TRAILER PARK SAMPLING
May 12, 1997





Author: Ralph Howard at REGION4

Date: 02/03/98 10:55 AM

Priority: Normal

TO: stewarrg@columb34.dhec.state.sc.us at IN

CC: Kevin Koporec

CC: Cynthia Peurifoy

CC: Ralph Howard

CC: Jan Rogers

Subject: Re[2]: Westgate MH Site, SC: Assistance setting a Pb Goal

----- Message Contents -----

Re: Lead (Pb) at Westgate

Gary:

Below is Kevin Koporec's response back to me after I ccmailed Glenn Adams (also in Elmer Akin's shop) about Westgate. Based on what he says, I would advise that your approach be based on these factors:

1. If EPA was to implement this removal today, we would go to 400 ppm.
2. If the RP wants to use some other cleanup goal, it should be with State approval, and should be based on site-specific data as Kevin notes below, such as bioavailability of the particular Pb species present, possible contributing exposure from other sources than surf. soil, etc.
3. However, site-specific data to date (that Dr. Marino has) showed, in the past, a completed pathway as evidenced by elevated blood lead levels, i.e. there **IS** bioavailable Pb present. This argues against allowing a higher number.
4. Dr. Marino believed at one point that our 1995 removal, to 500 ppm, had not been stringent enough (should've been to lower goal). However, the 11/96 surf. soil data showed Pb in areas NOT removed by EPA, suggesting that EERB's grid just missed some high areas or (more likely) hot spots. The cause of the post-1995-removal blood lead numbers Dr. Marino saw isn't clear and could be either one, although we obviously need to consult Dr. Marino on this.

If you elect to allow them to submit such Pb data, we'd be happy to review it (Elmer's staff) and offer an

opinion on it. Let me know if I can help further.

Forward Header

Subject: Re[2]: Westgate MH Site, SC: Assistance setting a Pb Goal: S

Author: Kevin Koporec

Date: 02/03/98 07:39 AM

Ralph,

400 ppm is our current PRG/action level for Pb in surface soil, per the revised interim directive on soil Pb. This value is based on the current IEUBK Pb model for child exposure. Site-specific data (e.g. bioavailability of soil Pb, exposure levels to Pb from other routes) would need to be obtained to alter this PRG.

I am out of the office today, but I will be happy to speak with you (and Dr Marino as needed) when I return.

Kevin

Author: Ralph Howard at REGION4
Date: 06/19/97 05:29 PM
Priority: Normal
TO: klendermh@columb34.dhec.state.sc.us at IN
CC: Floyd Ledbetter
CC: Ralph Howard
Subject: Re: Westgate Trailer Park metals data

----- Message Contents -----

Mike: Below is from Tim Simpson at Athens, they've received the metals data from the soil samples ya'll collected....

What's going on with your RI/FS? No one's called me yet from Exide, I'm kind of surprised....

I'm concerned about the time going by since ya'll had the surface soils data on hand (11/96 or so)... You probably need to go ahead and warn Exide that they're gonna have to get the above-500-ppm soil out of there. Above 500 mg/kg is officially REMOVAL-type stuff, and we'll all be asked later why it took so long if those levels are supposed to lead to immediate removal. You could touch base with Shane Hitchcock here and request EPA to do it, which will buy you all some time since EERB will give Exide the chance to do the removal anyway.

Mike, also, this soil data Tim has should probably be used by DHEC and EPA to supplement our understanding of exactly where the soil exceeds 500 ppm. For ex., this data may show a problem in an area that Exide's 11/96 data says is clean: so that when it's time to do the removal, they can 1) excavate based on these samples or 2) re-sample, but they can NOT rely on their old data only.

----- Reply Separator -----

Subject: Westgate Trailer Park metals data
Author: Timothy Simpson at REGION4
Date: 06/19/97 03:48 PM

I got some of the metals data back for Westgate. For the samples SED collected and analyzed, lead ranges from 200-1300 mg/kg. We detected a total of 18 different metals.

S. Machemer

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF CRIMINAL ENFORCEMENT, FORENSICS, AND TRAINING
NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
BUILDING 53, BOX 25227, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

April 9, 1997

MEMORANDUM

SUBJECT: Request For Laboratory Assistance, Lead
Characterization, Greer, South Carolina

FROM: *[Signature]*
Gene Lubieniecki
Civil Program Coordinator, NEIC

TO: Beverly A. Spagg, Chief
Air & EPCRA Enforcement Branch
Air Pesticides & Toxics Management Division, Region 4

This memo is in response to your March 19, 1997, request for the subject support and subsequent phone conversations between NEIC personnel and Floyd Ledbetter of your staff. As discussed, NEIC will provide analytical support to help identify the source of lead contamination in the local community of Westgate.

We are currently planning to conduct a site reconnaissance in late April to help develop a sampling plan/analysis strategy and we understand that Region 4 is working to ship air filter samples to the NEIC for analysis. Based on previous discussions, Region 4 will be responsible for collection of soil samples which will be shipped to the NEIC for analyses. Until we receive and begin working with the samples, it is difficult to determine a reasonable time frame for sample analyses and evaluation. Our understanding is that there is currently no deadline (statute of limitations, etc.) for returning sample analyses and evaluation results. Therefore, we propose to maintain communications with your staff regarding our activity and progress once we begin receiving the samples.

If you have any questions, please contact me (303-236-5111, ext. 539) or Dr. Steve Machemer, NEIC Project Leader for this support (303-236-5132, ext. 287).

cc: Bruce Miller, Assoc. Director for Technical
Support, Region 4
Floyd Ledbetter, Region 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
100 ALABAMA STREET, S.W.
ATLANTA, GEORGIA 30303-3104

MAR 19 1997

4APT-AEEB

MEMORANDUM

SUBJECT: Request for Assistance In Conducting Lab Analysis of Soil and High Vol Samples Collected in Greer, South Carolina, in Support of SCDHEC Hazardous Waste Division

FROM: Beverly A. Spagg, Chief *Beverly A. Spagg*
Air & EPCRA Enforcement Branch
Air Pesticides & Toxics Management Division

TO: Eugene Lubieniecki, Chief
Civil Enforcement Support Branch
NIEC Operations Division

Region 4 is requesting assistance in the form of laboratory analysis for specific lead compounds in both soil samples and High Vol filters in support of an ongoing enforcement action in South Carolina by the South Carolina Division of Hazardous Waste. The company (Exide) has completed a Remedial Investigation, dated January 1997, in which they drew several conclusions; mainly that Exide is not responsible for lead deposition in Westgate. Although they are the only source of lead in the area, they have highly elevated levels of lead on their property. Current models have shown that deposition from their stacks has occurred; however, they claim they are not responsible. The Regional Waste Division staff, in working with South Carolina, asked us if we knew of a way to show responsibility of lead deposition or could assist them in doing so. Attached is a proposal by members of my staff to specifically identify the source of lead emissions impacting Westgate Trailer Park.

We are under no specific deadline; however, we do not want to see a responsible party remove themselves from responsibility. We request that you evaluate our proposal and let us know your desire and ability to respond. We are also looking into Region 4's capability to perform these analysis in our own laboratory, and should both of you desire, to participate we will work out any details necessary to split the work. Please contact either myself or Dick DuBose, Air Enforcement Section Chief at (404) 562-9168, Floyd Ledbetter at (404) 562-9218 or Jean Campbell at (404) 562-9193 of my staff if you have any questions or need assistance.

Attachments

Air Document

**Proposal for Identifying the Specific Source of Pb (Lead) Emissions in Westgate
Trailer Park in Greer, South Carolina**

**U.S. Environmental Protection Agency
Region 4
Atlanta, Georgia**

**Floyd Ledbetter, P.E., & Jean Campbell
Air & EPCRA Enforcement Branch
Air Pesticides & Toxics Management Division**

March 13, 1997

Site Location:

Westgate Trailer Park, Greer, South Carolina, is located at the intersection of US Hwy 29 and Old Chick Springs Road on the north side of the P & N RR. Westgate Trailer Park, developed in the 1960's, is on approximately a 5-acre tract adjacent to Exide Corp. Located to the SW.

Background:

In June of 1994, Roy F. Weston, Inc., under contract to EPA, collected soil samples in the trailer park and a clean up was undertaken in part of the trailer park. Currently SCDHEC has a Consent Order 96-12-HW (Hazardous Waste) which calls for Exide to do additional remediation if they feel it necessary and show Exide responsible. EPA Region 4 Waste Division called the AP&TM Division and asked if we could render assistance.

Objective:

Identify the source of Lead (Pb) deposited within the trailer park so that the responsible party can be identified and so remediation can be undertaken as needed by said responsible party.

Proposed Methodology:

In addition to standard methods, i.e., modeling and lack of other sources of Pb emissions, we believe it possible to identify the source of Pb emissions through speciation of the Pb bearing compounds in the soil samples both from the Exide property and in the trailer park as well as from the High Vol samples collected in 1994-95 by the State.

Required Work:

Collect approximately (30) thirty, 100 gram (4 oz) samples at both locations in a manner that is representative of Lead on the site based of previous soil samples as taken for the Exide Corp. In 1996, as shown in the Remedial Investigation Report Westgate Trailer Park dated January 1997. Concentrations are not critical, as long as they contain enough Lead for analysis. In addition collect approximately five (5), 100 gram (4 oz.) soil samples from an area adjacent to US 29 but away from the influence of Exide's emissions. These are to show automotive impact or the lack thereof.

Responsible Party for Work:

a) Soil samples will be collected either by South Carolina personnel or EPA Region 4 personnel and shipped to the EPA Lab for analysis.

b) The 10 highest Pb bearing High Vol samples will be shipped by South Carolina to the EPA Lab for analysis.

Assistance Needs:

Soil and High Vol analysis in the form of determination of specific Pb compounds in each sample, i.e. PbO, Pb₃O₄, PbS, PbSO₄, etc., to enable identification of the source and/or the elimination of automotive sources as contributors.

- a) Time table of analysis and reports,
- b) Cost if any and to whom
- c) Any special requirements or needs.

EXIDE BATTERY / WESTGATE

Conf Call on 4/2/97 2:00 PM

Ralph O. Howard
WASTE-NSMB-SC
28829

NEIC
303-

- NEIC
Joe Lowry + Floyd L. spoke 4/1/97. They can and will support

- Joe - went thru similar cases

NEIC → [John Simon 264
Steve Macheimer
MACHEMER 287
JOE LOWRY]

- How:
 - 1) Co-contaminants (battery component metals) - As Antimony
 - 2) isotope ratios
 - 3) mat'l's assoc. w/ sulfuric acid - selenium (elevated)- get samples from highway ROW also

- Send the high-vols on...

- Does the state have older (pre-'94) filters?

- Soil sampling...

- need an undisturbed population - 20
- need a highway - 20 (no Exide)
- receptor (trailer pk) - 20
- soil onsite - 5 or 10?

1) Depth profile

2) Distance (diminish away)

- For now, start w/out soil sampling

RATIOS
Pb 206
Pb 207
Pb 208

EXIDE BATTERY/WESTGATE

Mtng Conf. Call / 2-13-97

Questions re: current status + process

RH → Overview of history
Removal → summer '94

Recent 4/44 exceed 500 ppm

Exide: no surf water ✓

NO Air exceedances ✓

NO discussion of Westgate at all.

Discussion of "fingerprinting"

What is objective? Marino ⇒ stop exposure

Not → paint, dust etc. in homes (Marino)

Much discussion

To do:

A) Fingerprint Effort: Floyd Ledbetter - info; Phil Sharping also

B) Air will continue their 303 effort - or, determining if they can or cannot do one...

Ralph O. Howard, Jr.
WASTE/NSMB #2882

Mike Klender -
Dr. Robert Marino - HH Eval

⁹⁰⁴⁻
Doug Johns - Dist
App. III

Phil Sharping - Air QC
in District

Floyd Ledbetter

Astrid Aponte

Caroline Robinson

Dick Dubose

Beverly Spang

Leif Palmer-EAD

Ralph O. Howard, Jr.

EXIDE BATTERY

FEB. 13, 1997 Meeting

Floyd LEDBETTER -	AIR ENF.	2-9218
Astrid E. Aponte	"	29199
Caroline Robinson	"	29203
Dick DuBose	"	2-9168
BEVERLY SPAGG	"	29170
Leif Palmer	EAD	2-9542
Ralph O. Howard, Jr.	NSMB	28829

CONVERSATION RECORD

TIME

11:45 AM

DATE

12-06-96

TYPE

☐ VISIT☐ CONFERENCE☐ TELEPHONE☒ INCOMING☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT
WITH YOU

Mike Klender

ORGANIZATION (Office, dept., bureau,
etc.)

SCDHEC

TELEPHONE NO.

(803) 896-4073

SUBJECT

EXIDE BATTERY - Greer

SUMMARY

- Consent order signed 4/9/96, FBI investigation... order is with BSHW mgmt. Cochran motors personnel took fill dirt from Exide's WW lagoon... Exide signed; plant, King Acres, trailer park
- Nov. '96 soil samples - 50 - collected. Gridded-out. Sampled areas EPA did not take out in removal.
- Mike requested new blood tests on new residents; if problem, indicates soil is the source. State would get them to remove soil, perhaps down to 200 mg/kg (not 400). Drkg. water + interviews w/residents → soil, if blood-levels remain high. Not simply "lead-dust" in trailers, either (they've done dust samples).
- By ~~May~~ March, full report will come in and can nail Exide, or not. May OR may not need more soil removal.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

Ralph O. Howard, Jr.

SIGNATURE

Ralph O. Howard, Jr.

DATE

12-6-96

ACTION TAKEN

SIGNATURE

TITLE

DATE

Phyllis Warrilow
29198

EXIDE[®] CORPORATION

Neal S. Lebo

Director

Environmental Operations

P.O. Box 14205

Phone: (610) 378-0577

645 Penn Street

Fax: (610) 371-0463

Reading, PA 19612-4205 E-mail: NLEBO@EXIDEWORLD.COM

LAW OFFICES

Poliakoff and Associates, P.A.
215 Magnolia Street
Spartanburg, South Carolina 29306

MAILING ADDRESS.

P.O. BOX 1571

SPARTANBURG, SOUTH CAROLINA 29304

TELEPHONE: (864) 582-5472

(864) 582-8101

FACSIMILE: (864) 582-7280

GARY W. POLIAKOFF
AttyPoliko@aol.com

RAYMOND P. MULLMAN, JR.
RMullmanjr@aol.com

BERNARD B. POLIAKOFF

(815) 1955

J. MANNING POLIAKOFF

(823) 1959

MATTHEW POLIAKOFF

(815) 1979

November 18, 1999

Mr. Ralph Howard
U.S. EPA Region IV
Atlanta Federal Center
61 Forsythe Street, SW
Atlanta, GA 30303-3415

RE: EXIDE CORPORATION - GREER, S.C. FACILITY

Dear Mr. Howard:

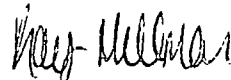
Enclosed is the deposition of Exide's in-house counsel, Ari D. Levine.

As you know we have requested that Exide clean up King Acres subdivision. We hope that this information will assist S.C. DHEC in getting cooperation from Exide Corporation. We believe the clean up should be 400 ppm or less and down to six inches.

Thank you for your attention to this matter.

With best regards, I am

Yours very truly,



RAYMOND P. MULLMAN, JR.
ATTORNEY AT LAW

Enclosure

cc: Steve Machemer, NEIC
Ms. Theresa Hosicle, NEIC

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
GREENVILLE DIVISION

MARK ANTHONY BYARS, :
Plaintiff :

v. :

EXIDE CORPORATION, :

Defendant : C/A No: 6:99-1933-20

October 22, 1999

Oral deposition of ARI LEVINE, held in
the offices of SCHNADER, HARRISON, SEGAL &
LEWIS, LLP, Suite 3600, 1600 Market Street,
Philadelphia, Pennsylvania, commencing at
11:05 p.m., on the above date, before Sheila E.
Malen, Registered Professional Reporter and
Notary Public in and for the Commonwealth of
Pennsylvania.

ESQUIRE DEPOSITION SERVICES
15th Floor
1880 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103
(215) 988-9191

<p>6</p> <p>1 conversation that you and I had regarding</p> <p>2 his deposition, I pointed out to you our</p> <p>3 concern about inquiring into privileged</p> <p>4 matters. It is not our intention to</p> <p>5 obstruct your examination in any fashion,</p> <p>6 <i>but if at any time either Mr. Levine or I</i></p> <p>7 <i>think that you're delving into privileged</i></p> <p>8 <i>matters, we will raise that objection,</i></p> <p>9 <i>and/or we will confer. If in the event</i></p> <p>10 <i>that we do confer on that, under Judge</i></p> <p>11 <i>Herlong's order, then we will advise you</i></p> <p>12 <i>what we talked about.</i></p> <p>13 MR. MULLMAN: Sounds good. Do</p> <p>14 you want to make that letter an exhibit?</p> <p>15 MR. GEDDIE: That's fine. Sure.</p> <p>16 Make it Exhibit No. 1. That's a copy of</p> <p>17 the letter.</p> <p>18 MR. MULLMAN: That's fine. I</p> <p>19 don't think that's going to be a problem.</p> <p>20 (Whereupon, Exhibit 1 was marked</p> <p>21 for identification.)</p> <p>22 BY MR. MULLMAN:</p> <p>23 Q. Mr. Levine, when did you first start</p> <p>24 working for Exide?</p>	<p>8</p> <p>1 A. The title changed more to reflect the</p> <p>2 reality of my job responsibilities in or about</p> <p>3 October 1997, I believe, to simply Assistant</p> <p>4 General Counsel. In August 1997 -- excuse me.</p> <p>5 The October would have been October 1996. In</p> <p>6 August 1997, I assumed, as well, the title of</p> <p>7 Director Regulatory Affairs, which made me, in</p> <p>8 addition to my counsel responsibilities, a</p> <p>9 member of the management team responsible --</p> <p>10 decision-making in certain environmental areas.</p> <p>11 Q. And who had that job before August of</p> <p>12 1997?</p> <p>13 A. That job did not exist. It was a</p> <p>14 part of another job.</p> <p>15 Q. Okay. Well, how did your</p> <p>16 responsibilities change from November '94 to</p> <p>17 October '96 and then to August '97?</p> <p>18 A. From November 1994, really through</p> <p>19 August '97, my responsibilities suddenly</p> <p>20 expanded in terms of the scope of legal areas</p> <p>21 for which I was responsible. The change in my</p> <p>22 title in or about October 1996 to simply</p> <p>23 Assistant General Counsel was a recognition of</p> <p>24 that fact. After August 1997, I assumed, in</p>
<p>7</p> <p>1 A. November 1994.</p> <p>2 Q. Did you work for any of Exide's</p> <p>3 subsidiaries before that?</p> <p>4 A. I did not.</p> <p>5 Q. Do you know the names of Exide's</p> <p>6 subsidiaries?</p> <p>7 A. I know the names of some of them.</p> <p>8 Q. Okay. Can you name them?</p> <p>9 A. We're talking current subsidiaries?</p> <p>10 Q. Sure.</p> <p>11 A. General Battery Corporation, Exide</p> <p>12 Holdings Europe, Inc. Excuse me. Exide</p> <p>13 Holdings Europe, SA. Exide Investments, Inc.</p> <p>14 There's another company. I believe the name is</p> <p>15 Exide Company, LLC. Those are the direct</p> <p>16 subsidiaries that I recall at this time.</p> <p>17 Q. And what was your job starting in</p> <p>18 November of 1994?</p> <p>19 A. My title was Assistant General</p> <p>20 Counsel, Environmental Services. I'm sorry.</p> <p>21 Was the question 1994?</p> <p>22 Q. Yes.</p> <p>23 A. Okay.</p> <p>24 Q. And when did you change positions?</p>	<p>9</p> <p>1 addition, what I would call line responsibility</p> <p>2 for certain environmental matters.</p> <p>3 Q. And what certain responsibility --</p> <p>4 environmental matters were they?</p> <p>5 A. Off-site lia -- pardon me. Not</p> <p>6 off-site liabilities. Third-party owned sites,</p> <p>7 which are, or thought to be, contaminated, and</p> <p>8 facilities which the company formerly operated,</p> <p>9 or closed plants.</p> <p>10 Q. Would that include Westgate Trailer</p> <p>11 Park, King Acres, in Greer, South Carolina?</p> <p>12 A. Yes, it would.</p> <p>13 Q. Have you ever been deposed before?</p> <p>14 A. I have.</p> <p>15 Q. Okay. In what case?</p> <p>16 A. I was deposed in a case encaptioned</p> <p>17 Pep Boys, Manny, Mo and Jack, Incorporated</p> <p>18 versus Exide Corporation, which is pending in</p> <p>19 Superior Court in the State of New Jersey. I</p> <p>20 was also deposed as a 30(b)(6) deponent. I'm</p> <p>21 trying to remember the name of the case. In a</p> <p>22 case brought by RSR Corporation in connection</p> <p>23 with the Avanti, A-V-A-N-T-I, site in</p> <p>24 Indianapolis.</p>

10

1 Q. What were the allegations in that
2 case?
3 A. The RSR case?
4 Q. Uh-huh.
5 A. RSR has brought suit against a number
6 of parties claiming that they are potentially
7 responsible parties under CERCLA for response
8 costs incurred and to be incurred at the Avanti
9 site.
10 Q. And did that have to do with lead
11 contamination?
12 A. The Avanti site was a battery -- I
13 believe a battery smelter. A lead smelter.
14 Excuse me. So there is lead contamination
15 present there, yes.
16 Q. Was the cleanup of lead contaminated
17 soil?
18 A. I do not believe there has been a
19 cleanup of lead contaminated soil there yet.
20 Q. Do you know what the proposed cleanup
21 level is?
22 A. I do not. I'm not certain there is
23 one yet.
24 Q. And what state is that? I'm sorry.

1 environment at King Acres, using a site-specific
2 model approved by EPA and apparently accepted
3 to DHEC.
4 Q. What are the different site factors
5 that you would apply to King Acres that wouldn't
6 be applied in Westgate Trailer Park?
7 A. I am not familiar in any detailed
8 sense with the computer modeling. That's one of
9 the reasons we retain outside contractors. In
10 addition, I would note that the cleanup level
11 for Westgate Trailer Park was not developed
12 using a computer model; they were using site
13 specific data.
14 Q. What was used?
15 A. It appears that DHEC developed the
16 cleanup level for Westgate Trailer Park, it
17 believes, using EPA modeling data and EPA
18 guidance.
19 Q. Well, has EPA agreed with the DHEC
20 level, established level of 400 parts per
21 million?
22 A. EPA has stated that they have no
23 objection to the application of a 400 parts per
24 million cleanup level at Westgate Trailer Park.

11

1 A. Indiana.
2 Q. Have you had a chance to look at the
3 documents that I sent your attorney Wednesday of
4 this week?
5 A. I have.
6 Q. Has Exide performed any remediation
7 in King Acres?
8 A. No.
9 Q. Are they studying the level to be
10 cleaned up in King Acres?
11 A. We have retained Advanced Geo
12 Services Corporation or AGC of Chadds Ford,
13 Pennsylvania, and AGC has, I believe, completed
14 the sampling necessary to begin running the
15 model to determine the answer to that question.
16 Q. Why wouldn't you use the same cleanup
17 level that was used in Westgate Trailer Park?
18 A. We believe that the cleanup level
19 that was used at Westgate Trailer Park is overly
20 conservative, perhaps by an order of magnitude,
21 and --
22 Q. Okay.
23 A. -- are attempting to determine what
24 is protective of human health and the

1 Q. Have you seen a memo from EPA,
2 authored by Kevin Koporec that states 400 parts
3 per million would be an appropriate level to
4 clean up Westgate Trailer Park?
5 A. I have seen a memorandum from
6 Mr. Koporec. I don't recall whether or not it
7 has that exact verbiage in it.
8 Q. And the computer modeling that you're
9 talking about, is that the IEUBK model?
10 A. Yes, it is.
11 Q. And it's your understanding that the
12 IEUBK model was not used to determine the
13 appropriate cleanup level at Westgate Trailer
14 Park?
15 A. It is my understanding that the model
16 was never actually run, either by DHEC or by
17 EPA.
18 Q. What about NEIC?
19 A. Or NEIC.
20 Q. And did Exide ever hire an expert or
21 consultant to do an IEUBK model at Westgate
22 Trailer Park?
23 A. We retained an expert, Advanced Geo
24 Services Corporation, or AGC, to use what D

14

1 represented to us was site-specific data, and
2 run that data through the model.
3 Q. In some of that site-specific data,
4 are there elevated blood lead levels in children
5 at Westgate Trailer Park?
6 A. I do not recall there being very many
7 elevated blood lead levels, if any, but blood
8 lead data was one of the inputs in the model,
9 yes.
10 Q. How would you determine what elevated
11 is?
12 A. I would apply the criteria published
13 by the United States Centers for Disease
14 Control, which states that an elevated blood
15 lead is a confirmed blood lead measurement in
16 excess of
17 10 micrograms per deciliter.
18 Q. And when you say confirmed, what does
19 that mean?
20 A. It means a venipuncture, analyzed by
21 a licensed laboratory.
22 Q. So you would say the finger stick
23 does not have any relevance?
24 A. No, I would say it's relevant, but it

15

1 is not conclusive. And more importantly, that's
2 what the CDC guidance itself says.
3 Q. Why do you think DHEC uses the finger
4 stick method?
5 A. You'd have to ask DHEC why they used
6 it. I know the finger stick method is used
7 because it is a relatively inexpensive and
8 useful screening device.
9 Q. Has the NEIC finished their report
10 related to their determination of the source of
11 the lead at Westgate Trailer Park?
12 A. I am not aware of any final report
13 from NEIC or any report from NEIC that addresses
14 the source of lead from Westgate Trailer Park.
15 Q. So you're not aware of the draft
16 report?
17 A. I am aware of a draft report which
18 identifies lead levels at Westgate Trailer Park.
19 I do not recall that that report draws any
20 conclusions about the source of the lead.
21 Q. Okay. Have you looked at anything to
22 prepare for this deposition besides the
23 documents that were sent to your attorney on
24 Wednesday?

16

1 A. I have looked at published documents
2 of the United States government relating to lead
3 cleanup levels to refresh my memory.
4 Q. Okay. Which documents?
5 A. I don't recall the citation, but the
6 publication by the United States Environmental
7 Protection Agency and United States Department
8 of Housing and Urban Development establishing
9 levels of concern at public housing projects.
10 I have also looked at the June 3,
11 1998 proposed rule amending the existing rule, a
12 rule proposed by EPA, which would have altered
13 those criteria.
14 Q. Have you looked at any South Carolina
15 Department of Health and Environmental Control
16 documents?
17 A. I'm not aware that any such documents
18 exist on cleanup levels for lead.
19 Q. And are they the lead agency to
20 determine what the appropriate cleanup is at the
21 Westgate Trailer Park in King Acres?
22 A. Yes, they are. *AND*
23 Q. And do they have the authority to
24 request Exide to clean up Westgate and King

17

1 Acres at whatever level they want?
2 A. No, they do not.
3 Let me clarify my last answer. They
4 certainly have the authority to require Exide to
5 conduct a cleanup, assuming the levels are such
6 as would require a cleanup, but they do not have
7 the authority to do it at any level they choose.
8 Q. Okay. And has Exide sued DHEC
9 related to the remediation in Westgate Trailer
10 Park?
11 A. Yes.
12 Q. Can you tell us what the allegations
13 of that lawsuit are?
14 A. I couldn't tell you all of the
15 allegations, but the thrust of the litigation,
16 which was filed in Circuit Court, was that DHEC
17 was violating a Consent Agreement which it
18 entered into with Exide on or about August 5th
19 of this year which allowed Exide to proceed with
20 the cleanup of Westgate Trailer Park.
21 Q. And how did DHEC violate it?
22 A. DHEC attempted to take control of the
23 cleanup when the Consent Agreement specifically
24 provides that Exide is to perform the cleanup,

18

1 Exide or its contractor.
 2 Q. And do you know why DHEC did that?
 3 A. I do not know why DHEC did that.
 4 Q. That was not mentioned in the
 5 hearing?
 6 A. DHEC stated -- well, I should state,
 7 I was not present at the hearing. It was
 8 reported to me -- there was information about
 9 positions DHEC took reported to me by my
 10 counsel, and that's the only basis of any
 11 knowledge I have on that subject.
 12 Q. And who represented Exide in that
 13 hearing?
 14 A. Elizabeth Partlow of the Ogletree law
 15 firm.
 16 Q. When did DHEC first mention to Exide
 17 that they wanted Exide to investigate possible
 18 cleanup of Westgate Trailer Park?
 19 A. Are you asking when did they first
 20 request a cleanup or when did they first request
 21 an investigation?
 22 Q. Let's say both.
 23 A. The request for an investigation was
 24 sometime in late 1995 or early 1996. I don't

1 with that?
 2 A. There are certainly a significant
 3 number of sample points that are above 500, but
 4 I don't recall if the average is over 500.
 5 Q. So you don't know what percentage is
 6 below 500?
 7 A. Not -- no, I don't know the exact
 8 percentage.
 9 Q. Okay. Do you know what the
 10 difference would have been in price, in cost, to
 11 Exide to clean it up from 400 parts per million
 12 to 500?
 13 A. I don't know the exact number.
 14 Q. Did the NEIC report say that all of
 15 Westgate had to be cleaned up, according to
 16 their study?
 17 MR. GEDDIE: You mean the draft
 18 report?
 19 BY MR. MULLMAN:
 20 Q. Yes, the draft report.
 21 A. I don't believe the draft report made
 22 any conclusions of that type.
 23 Q. Okay. Why don't we look at that
 24 report.

19

1 know the exact date. The request for a cleanup
 2 of Westgate Trailer Park came late winter, early
 3 spring of 1997. Again, I don't recall the exact
 4 date.
 5 Q. And why did it take two years for
 6 Exide to clean up the site?
 7 A. Exide submitted a cleanup plan for a
 8 cleanup of Westgate in the time requested by
 9 DHEC. That report -- pardon me, that cleanup
 10 plan was submitted in the month of July 1997.
 11 DHEC had insisted that the cleanup level be 400
 12 parts per million, and Exide attempted to
 13 determine what basis there was for that level.
 14 Exide spent the bulk of that two-year period
 15 attempting to obtain an answer to that question.
 16 Q. Well, did Exide ever offer to clean
 17 it up at a different level?
 18 A. Yes, repeatedly.
 19 Q. Okay. What was that level?
 20 A. 500 parts per million.
 21 Q. Okay. What's the average level of
 22 lead in soil at Westgate Trailer Park?
 23 A. I do not recall.
 24 Q. Okay. It's over 500; would you agree

1 MR. GEDDIE: Is that in this
 2 stack?
 3 MR. MULLMAN: Yeah, it should be.
 4 (Whereupon, Exhibit 2 was marked
 5 for identification.)
 6 BY MR. MULLMAN:
 7 Q. Before Wednesday of this week, had
 8 you ever seen this report?
 9 A. The document which has been marked
 10 Exhibit 2 consists of a cover memorandum from
 11 Diana Love, Esquire, Director NEIC, to Bruce
 12 Miller at EPA Region 4, then has what appears
 13 to be a number of attachments. I believe that the
 14 only document I have seen before is the first
 15 attachment, which is the first four pages after
 16 the blue sheet of paper in Exhibit 2.
 17 Q. Okay. Have you had any conversations
 18 with anybody at the NEIC related to this report?
 19 A. No.
 20 Q. Have you had any conversations with
 21 anybody at the EPA related to this report?
 22 A. Yes.
 23 Q. Okay. Who?
 24 A. Reuben Bussey, Esquire, Assistant

<p style="text-align: right;">22</p> <p>1 Regional Counsel, EPA Region 4, and Billy 2 Bright, who, I believe, is with the enforcement 3 section at EPA Region 4. 4 Q. In the introduction, which comes 5 right after the top page -- 6 A. This is on the second sheet after the 7 blue sheet? 8 Q. Yes. 9 A. Okay. 10 Q. In the introduction, it says the 11 objective was to identify the source of lead 12 contamination found in the trailer park soil, 13 correct? 14 A. It does say that, yes. 15 Q. Has Exide ever hired an expert or 16 consultant to figure out the source of the lead 17 at the trailer park? 18 A. No. 19 Q. Have they ever done that to figure 20 out the source of the lead in King Acres? 21 A. No. 22 Q. Why not? 23 A. We haven't seen any reason to do that 24 analysis.</p>	<p style="text-align: right;">24</p> <p>1 that it's 25 to 50 parts per million? 2 A. I would have to consult with an 3 expert to know whether that's a valid number or 4 not. 5 Q. Okay. Now, Exide owns several homes 6 in King Acres, correct? 7 A. Yes, it does. 8 Q. Have you determined if any of those 9 homes have lead paint in them? 10 A. Not to my knowledge. 11 Q. So would you agree that lead paint 12 probably is not a source of the lead in the soil 13 at King Acres? 14 A. I would not agree with that, because 15 I don't know if any analysis has been made to 16 know whether lead paint is a contributing source 17 or not. 18 Q. And you haven't tried to determine 19 that? 20 A. I have not, no. 21 Q. Let's go to the next page, under 22 Results. Right in the middle, it says "For all 23 80 samples collected, lead concentrations 24 average 812 micrograms per kilogram and range</p>
<p style="text-align: right;">23</p> <p>1 Q. Okay. Does Exide know the source of 2 the lead? 3 A. Exide suspects that it is a 4 significant contributor to lead levels in both 5 King Acres and Westgate. 6 Q. Do they know of other contributors? 7 A. We know that there are numerous 8 anthropogenic sources of lead anywhere in the 9 United States, as well as natural sources of 10 lead. Lead is a very pervasive compound in the 11 environment. And so any of those sources, 12 anthropogenic and natural, could contribute to 13 lead levels, both at King Acres and at Westgate. 14 Q. Do you know what the background level 15 of lead in the soil in Greer, South Carolina is? 16 A. No. 17 Q. Had you ever asked any of your 18 experts or consultants to determine what the 19 background level of lead is? 20 A. I have not. 21 Q. Have you mentioned to DHEC or EPA 22 that you would like to know that information? 23 A. I have not, no. 24 Q. Would it surprise you to find out</p>	<p style="text-align: right;">25</p> <p>1 from 287 to 2,760 micrograms per kilogram with a 2 relative standard deviation of 63 percent." 3 That's what it says; correct? 4 A. That is what it says. 5 Q. Okay. So would you agree that the 6 average is 812? 7 A. Assuming the analysis is 8 representative and was done properly, yes. 9 Q. So why does it matter, if Exide is 10 going to clean it up, if it's 400 or 500 parts 11 per million? 12 A. Exide is aware of cleanup levels 13 which are in use throughout the United States. 14 The 400 parts per million cleanup level is lower 15 than most cleanup levels used in residential 16 areas. And while we do not, and have never 17 taken the position that it is never appropriate 18 to clean to 400, we believe that before one 19 departs from the norm, there ought to be a 20 scientific basis for doing so. 21 Q. Okay. But they determined the 22 cleanup level by site-specific factors, correct? 23 A. At Westgate? 24 Q. Yes.</p>

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1 A. No, they did not.
2 Q. They didn't? Do they do that --
3 A. I'm sorry. "They" meaning DHEC?
4 Q. Yes.
5 A. They did not so determine. They did
6 not use that method to determine the cleanup
7 level at Westgate.
8 Q. Well, is one of the reasons why they
9 wanted a cleanup level so low, because children
10 had had high lead levels in Westgate Trailer
11 Park?
12 MR. GEDDIE: Counsel, he can't
13 speak for DHEC.
14 BY MR. MULLMAN:
15 Q. Well, have you seen any documents
16 that evidence the reason why DHEC wanted you to
17 clean up to the level of 400 was because
18 children had high lead levels?
19 A. I have seen no such document.
20 Q. Okay. Is Exide aware that children
21 have had elevated lead levels at Westgate
22 Trailer Park?
23 A. Exide has seen data -- let me
24 rephrase that. I have seen data which indicates

1 Westgate Trailer Park.
2 Q. Why don't we just talk about the
3 Greer facility, then. That might be easier.
4 A. I'm sorry. Again, I didn't mean to
5 cut you off.
6 Q. No problem.
7 A. There have been 21 litigation matters
8 filed making the allegations you described
9 the vicinity of the Greer complex.
10 Q. Related to children?
11 A. Allegations brought on behalf of
12 children, yes.
13 Q. How many property owners in Ki
14 Acres have complained or alleged of lead
15 contamination on their property?
16 A. When you say "complained," do
17 mean have filed complaints in court?
18 Q. No. I mean complained to Exide.
19 either through DHEC or call-in to Exide?
20 A. At what point in time?
21 Q. Since they took over the facility i
22 1987.
23 A. I don't know how many people b
24 called in the 12 years since then.

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1 that less than five children have elevated blood
2 leads defined as I stated earlier, meaning that
3 the -- there was some analysis which indicates
4 that their blood lead exceeded ten micrograms
5 per deciliter. It is my recollection, however,
6 that all of those analyses were by finger prick,
7 and under the CDC guidance, a finger prick
8 evidencing a blood lead greater than ten
9 micrograms per deciliter should be followed up
10 with a venipuncture and analysis. I do not
11 believe that any of the samples that I have
12 seen, blood lead samples that I have seen, were
13 venipuncture analyses.
14 Q. Is Exide involved in litigation which
15 includes children from the Westgate Trailer
16 Park?
17 A. Yes.
18 Q. And how many lawsuits have been
19 initiated against Exide from people alleging
20 that their children had been exposed to amounts
21 of lead-causing injury?
22 A. Where?
23 Q. At Westgate Trailer Park.
24 A. I don't know how many are from

1 Q. Okay. Is it more than a dozen?
2 A. I can't recall more than a dozen
3 names, no.
4 Q. Okay. Well, did Mr. Byars ever
5 complain, Mr. Bobby Byars?
6 A. I believe he did, yes.
7 Q. Okay. Did Mr. Poole ever complain.
8 Thomas Poole?
9 A. The name is familiar, but I don't
10 recall whether he complained about property
11 damage or not.
12 Q. Okay. What about Mrs. Sylvia Pitts?
13 A. Again, the name is familiar, but I
14 don't recall whether Ms. Pitts complained ab
15 property damage or not.
16 Q. Okay. And you don't have any name
17 that you can specifically recall? I don't want
18 to go through the whole list.
19 A. I can recall Ms. Shirley Poteat
20 complained about property damage. Obvio
21 the plaintiff in this action has complained
22 about property damage. And Mr. and Mrs. J
23 and Mr. and Mrs. Hight, H-I-G-H-T.
24 Q. Okay. And Farrell Campbell?

FALSE
SEE EXHIBITS

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1 A. Again, I know the name, but I don't
2 know whether he complained of property damage.

3 Q. Well, I won't go through the whole
4 list then.

5 Now, we have sent Exide discovery
6 related to, I believe, the 17 lots that Exide
7 owns in King Acres. Have you made a diligent
8 search to find the deeds to find the names of
9 the people that Exide purchased them from?

10 I'm not done with that. I'm sorry.

11 A. I'm sorry. I have made a diligent
12 search to identify documents which were called
13 for by the discovery. I don't recall
14 specifically what the discovery sought.

15 Q. Okay. One part of the discovery
16 sought the purchase -- I mean the sellers' name
17 to Exide, and that was not included, and I
18 just -- I would imagine that the deeds would
19 have that. So I'm wondering if you looked for
20 the deeds, if you found the deeds, if we could
21 get the names of the sellers.

22 A. My recollection is that we do not
23 have the deeds for the vast majority of these
24 properties.

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1 Q. Well, have you sold those properties
2 to anybody since you purchased them?

3 A. No.

4 Q. Do you rent those properties to
5 anybody?

6 A. We rent one property.

7 Q. Going back to the NEIC report, the
8 next page, which would be, I guess, the fourth
9 page. You're right on it. In the third line it
10 says, "In other words, variations in lead
11 concentrations are too great over short
12 distances, less than a meter, to distinguish
13 areas of soil with lead concentrations below
14 400 micrograms per kilogram with any reasonable
15 confidence." It says that, correct?

16 A. Actually it says 400 milligram per
17 kilograms, but otherwise, yes.

18 Q. That's the same as parts per million,
19 correct?

20 A. Yes. That's my understanding, yes.

21 Q. So what does that sentence mean to
22 you?

23 A. I'm not sure I can add anything to
24 what's in the text. I'm not an expert in this

32

1 field.

2 Q. Okay. Well, can you read the next
3 sentence, then?

4 A. The sentence states, quote,
5 Therefore, based on a threshold level of
6 400 milligrams per kilogram, the entire area of
7 the trailer park must be remediated with the
8 possible exception of the northeast area, which
9 has previously undergone remediation activity.
10 Close quote.

11 Q. The previous remediation activity;
12 has EPA determined that Exide is the responsible
13 party for that, the cost of that remediation?

14 A. EPA has asserted that Exide is a
15 responsible party for those costs, yes.

16 Q. And what are the other responsible
17 parties?

18 A. I believe they've identified the
19 property owner, Mr. Maxwell. I don't know who,
20 if anyone else, they have identified.

21 Q. Okay. Is it C.R. Maxwell or Bruce
22 Reeves that owns Westgate Trailer Park?

23 A. My understanding is that Mr. Maxwell
24 owns it, but I haven't done a deed search, and

33

1 no one at Exide, to my knowledge, has requested
2 one, so I can't add any more to that.

3 Q. Okay. The Consent Order that -- I
4 think it was a '96 Consent Order -- that
5 determined the remediation activity at Westgate
6 Trailer Park, did that say how many inches down
7 cleanup should occur?

8 A. The 1996 Consent Agreement did not
9 address remediation of Westgate Trailer Park or
10 any other area, except to state that if it was
11 determined that cleanup was required, Exide
12 would agree to perform that cleanup.

13 That was a position that DHEC itself
14 took with respect to the Westgate Trailer Park,
15 which is why they insisted that a new Consent
16 Order, which was the Consent Order entered into
17 on or about August 5th of this year, be entered
18 into for that cleanup.

19 Q. Well, how many inches down did Exide
20 clean it up?

21 A. Approximately three inches was
22 removed at Westgate Trailer Park.

23 Q. And in the past, has DHEC or EPA
24 requested Exide clean it up to six or nine

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1 inches?
 2 A. I'm not aware of any requests for
 3 cleanup to nine inches by anyone. DHEC did
 4 previously propose a cleanup to a six-inch
 5 depth.
 6 Q. Okay. Well, why did they compromise
 7 and go down to three?
 8 MR. GEDDIE: How would he know
 9 that, Counsel? He can't speak for DHEC.
 10 MR. MULLMAN: Well, he might have
 11 been involved in the compromise.
 12 BY MR. MULLMAN:
 13 Q. So were you aware of the reasons why
 14 DHEC went from six inches to three inches?
 15 A. I don't know what DHEC found to be
 16 persuasive. Obviously, you'd need to ask them
 17 that question. Exide did make available to DHEC
 18 its consultant, AGC, who spoke with technical
 19 people at DHEC concerning the scope of the work
 20 plan.
 21 Q. Are you aware of any kind of
 22 agreement between Exide and DHEC or EPA that
 23 states that DHEC would allow Exide to clean it
 24 up to three inches if Exide agreed to clean it

1 MR. MULLMAN: Well, we'll just
 2 skip that then. Don't worry about it.
 3 BY MR. MULLMAN:
 4 Q. Do you know when Exide plans on
 5 cleaning up the soil in King Acres?
 6 A. As soon as we have an approved
 7 cleanup level and an approved work plan from
 8 DHEC.
 9 Q. Okay. And has DHEC indicated to
 10 that they want the cleanup to be 400 parts per
 11 million?
 12 A. At King Acres?
 13 Q. Yeah, King Acres?
 14 A. No.
 15 Q. Does Exide use the F-A-S-T System
 16 FAST System, with the Phoenix software?
 17 A. I don't know who developed -- who
 18 software is in use, but Exide does use a system
 19 called the FAST system.
 20 Q. And what does that system do?
 21 A. I don't know very much about the
 22 system, except that it is a financial reporting
 23 system used by our branch system.
 24 Q. Have you read the depositions in

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1 up to 400 parts per million instead of arguing
 2 about the 500, so there was a deal made? Are
 3 you aware of that?
 4 MR. GEDDIE: I object to the term
 5 "deal."
 6 THE WITNESS: And I'm not aware
 7 that there was a deal, as you've described
 8 it.
 9 BY MR. MULLMAN:
 10 Q. Okay.
 11 A. The parties deliberately left the
 12 contours of the work plan to technical experts
 13 talking to one another, not by or through
 14 lawyers.
 15 Q. In the NEIC materials, there's an
 16 April 14, 1998 letter to Mr. Lebo from Scott
 17 Wilson.
 18 A. I'm sorry. Let me try to find that.
 19 Q. Okay.
 20 A. April 14, 1998?
 21 Q. Yeah, 1998. It should be after these
 22 notes right here.
 23 MR. GEDDIE: We don't have Page 2
 24 of it.

1 Michael Smith's case?
 2 A. I have perused some of them, but
 3 certainly not all of them.
 4 Q. And were you involved in the
 5 production of documents in the Smith case?
 6 A. Yes, I was.
 7 Q. Okay. And are you aware of any
 8 documents being altered, destroyed or concealed?
 9 A. No.
 10 Q. You mentioned before that there are
 11 other possible sources for the lead in Westgate
 12 in King Acres, correct?
 13 A. That's correct.
 14 Q. Okay. Does Exide have any evidence
 15 that the lead in the trailer park or the
 16 subdivision came from other sources besides
 17 Exide?
 18 A. I recall that there are analyses of
 19 soil samples at Westgate which show that the
 20 lead levels increased significantly right along
 21 the edge of Old Buncombe Road, B-U-N-C-O-M-B-E
 22 I believe, which would suggest that automobile
 23 exhaust associated with the burning of leaded
 24 gasoline would be a contributing source.

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1 Q. Well, could another possible reason
2 be the transport of lead oxide to and from
3 Exide?
4 A. It would depend on what route the
5 trucks took to get there. But in any event, I
6 would have to rely upon experts to answer that
7 question.
8 Q. Okay. Do you know who at Exide made
9 the decision to purchase the property in King
10 Acres?
11 A. Which property?
12 Q. Any of the property owned by Exide?
13 A. I made the decision to acquire
14 Ms. Poteat's property as part of a settlement in
15 litigation brought by your firm. I do not know
16 who made the decision to purchase the other
17 properties which Exide currently owns at King
18 Acres.
19 Q. Have you ever been to the plant?
20 A. At Greer?
21 Q. Yes.
22 A. Yes.
23 Q. While it was operating?
24 A. Yes.

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1 Q. How many times?
2 A. While it was operating, two or three
3 times.
4 Q. Did you ever see clouds of smoke,
5 lead dust in the air?
6 A. Not that I recall, no.
7 Q. Who is your immediate supervisor?
8 A. Today?
9 Q. Uh-huh.
10 A. John Van Zile. Two words. V-A-N
11 Z-I-L-E.
12 Q. And what about back in 1995?
13 A. In 1995, my direct supervisor was
14 John Baranski, B-A-R-A-N-S-K-I.
15 Q. Could you list the members of the
16 corporate Environmental Resource Department that
17 had participated in, or were involved in any of
18 the work done at Westgate or King Acres?
19 A. The Environmental Resources
20 Department does not exist today, so I assume
21 you're talking prior to the restructuring of
22 that department?
23 Q. When was that restructuring done?
24 A. August 1997.

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1 Q. Well, what's the name of that
2 department now that's responsible for the same
3 things that the Environmental Resource
4 Department did?
5 A. There are two departments that cover
6 the responsibility that was formerly that of the
7 Environmental Resources Department. The
8 Regulatory Affairs Department addresses
9 liabilities at third-party sites and closed
10 sites. The Environmental Operations Department
11 addresses environmental compliance issues,
12 environmental health and safety compliance
13 issues at our operating facilities in North
14 America.
15 Q. Okay. Who is head of the
16 environmental operations?
17 A. Neal Lebo.
18 Q. And who is head of the Regulatory
19 Affairs?
20 A. I am.
21 Q. Okay. Does Matt Love still work for
22 Exide?
23 A. Yes, he does.
24 Q. Jeff Lead?

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1 A. No.
2 Q. Is he still a consultant?
3 A. No.
4 Q. Okay. What about Rick Roganwald?
5 A. Riengenwald?
6 Q. Riengenwald.
7 A. He is no longer employed by Exide.
8 Q. What about Despina Ferrante
9 Ioannidas? I-O-A-N-N-I-D-A-S, I think?
10 A. Ionaiddas. That's as close as I
11 could come to spelling it. Ms. Ionaiddas is no
12 longer employed by Exide Corporation.
13 Did you have a second name you asked
14 about?
15 Q. That was Despina Ferrante. That was
16 her maiden name, I believe?
17 A. I believe it was, and she is no
18 longer employed by Exide.
19 Q. What about Robin Daub?
20 A. Mrs. Daub is still employed by Exide.
21 Q. What about Mr. Goberni?
22 A. I don't know who Mr. Goberni is.
23 Q. Okay. Can you list the consultants
24 used by Exide at Greer?

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1 A. Exide currently uses Advanced Geo
2 Services Corporation in connection with the King
3 Acres investigation and preparation of work
4 plan. Exide also uses The Fletcher Group for
5 on-site work, meaning the former plant site.

6 Q. Has DHEC requested that Exide clean
7 up on-site?

8 A. DHEC has indicated that a cleanup
9 will be required, but they have not asked for
10 that cleanup again.

11 Q. And do you know the highest soil
12 sample result on-site?

13 A. No.

14 Q. I think I might have asked this, but
15 let me just ask again. Exide has never asked a
16 consultant or expert to conduct an IEUBK model
17 at Westgate or King Acres?

18 A. Exide did ask Advanced Geo Services
19 Corporation to run the IEUBK model using data
20 that DHEC provided, which it indicated was
21 site-specific. And Exide has retained Advanced
22 Geo Services Corporation to run the data which
23 has been or is being collected in King Acres
24 through the same model.

1 same firm.

2 Q. How did Exide attempt to measure or
3 determine the amount of fugitive emissions
4 escaping the plant?

5 A. I don't know.

6 Q. Do you know if they ever did attempt
7 to measure the fugitive emissions from the
8 plant?

9 A. I don't know.

10 Q. Are you aware that there's air *ANC*
11 monitors set up by Exide in King Acres in the
12 trailer park?

13 A. I know that Exide has high-volume air
14 samplers, as does DHEC, in the area. Where
15 they're located, I'm not entirely certain.

16 Q. Okay. And were they established
17 pursuant to EPA or DHEC protocol?

18 A. I'm not aware of DHEC having any
19 protocol for the siting or setting of air
20 samplers. The Exide monitoring devices were
21 situated consistent with EPA guidance.

22 Q. Are there any quality control
23 procedures put in place for those air monitors?

24 A. I don't know.

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1 Q. Which homes in King Acres are they
2 sampling, do you know?

3 A. I do not know.

4 Q. Okay. Besides soil sampling, what
5 else has The Fletcher Group done?

6 A. The Fletcher Group also has conducted
7 groundwater investigations over time. I don't
8 recall what other work they have done for Exide.

9 Q. Has RBR, Inc., Risk Based Remedies,
10 Inc., have they done any work in the Greer
11 facility or around the Greer facility?

12 A. I don't think so, no.

13 Q. Have you read the investigation
14 report related to allegations of blood switching
15 among employees?

16 A. I have read a report of outside
17 counsel that investigated certain allegations
18 concerning the blood-sampling program at Greer.

19 Q. And who was that outside counsel?

20 A. Outside counsel was Jack Dodds, with
21 the law firm of Morgan, Lewis & Bockius. Edward
22 S.G. Dennis of the same firm may also have been
23 involved in that, but I know Mr. Dodds was, as
24 was Dennis Morikawa, M-O-R-I-K-A-W-A, at the

1 Q. Has DHEC or EPA ever complained
2 Exide about the integrity of the results of
3 those air monitors?

4 A. Not that I recall.

5 Q. Have they ever complained about the
6 integrity of the results of the soil samples?

7 A. Not that I recall.

8 Q. Do the soil samples by DHEC match
9 with The Fletcher Group for the same location?

10 A. I'm not aware of any significant
11 disparity, if any.

12 Q. Are you aware of a shareholder or
13 investors' meeting in Bristol, Tennessee in
14 of 1995?

15 A. No.

16 Q. Have you conducted a diligent search
17 for the videotape of that meeting?

18 A. I have conducted a diligent search
19 for a videotape, as your firm has represented
20 our prior counsel that such a videotape exist
21 but I have not been able to identify either the
22 a meeting took place in or about the time
23 described, a meeting of shareholders occurred
24 or about the time described, or that a videotape

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1 of such a meeting exists.
 2 Q. Okay. Have you asked Arthur Hawkins
 3 or Alan Gauthier if they were at that meeting?
 4 A. I asked Mr. Hawkins' assistant to
 5 review his calendar for that time frame to
 6 determine whether a shareholders' meeting was
 7 held in or about that time.
 8 I don't recall whether I checked with
 9 Mr. Gauthier's assistant as well.
 10 Q. Is it Gauthier?
 11 A. Gauthier, is how he pronounces it.
 12 Q. Who is your main contact with DHEC?
 13 A. On what matter?
 14 Q. On the matter of the cleanup at
 15 Westgate Trailer Park or King Acres?
 16 A. Our main contact has been Scott
 17 Wilson.
 18 Q. Who is the attorney for DHEC?
 19 A. Jessica King, Esquire.
 20 Q. Have you talked to Dr. Marino about
 21 the blood lead levels in children at Westgate
 22 Trailer Park and in King Acres subdivision?
 23 A. We have never been able to obtain a
 24 meeting with Dr. Marino.

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1 Q. Are you aware of any children in King
 2 Acres that have alleged lead exposure?
 3 A. Several of the children on whose
 4 behalf pending litigation has been brought
 5 allege that they have been exposed to lead.
 6 Those complaints do not allege whether the
 7 exposure exceeds the CDC criteria. I should say
 8 whether the exposure, if any, exceeds the CDC
 9 criteria.
 10 Q. Has Exide paid for the costs of
 11 remediating Westgate Trailer Park in 1994 to
 12 EPA?
 13 A. I believe the cleanup by EPA was
 14 before 1984, but Exide has reached a settlement
 15 with EPA on its claim for past costs.
 16 Q. How many Consent Orders has Exide
 17 entered into with DHEC related to their
 18 operation at the Greer facility?
 19 A. I don't know the number.
 20 Q. Okay. Is it more than ten?
 21 A. I don't know.
 22 Q. Do you receive e-mails from EPA or
 23 DHEC?
 24 A. I have received a few e-mails over

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1 time, yes.
 2 Q. And have they been disclosed to
 3 plaintiff's counsel in litigation?
 4 A. Every one of them has been turned
 5 over to plaintiff's counsel in the Smith
 6 litigation.
 7 Q. Okay. Have any of Exide's
 8 consultants informed Exide that Exide is not the
 9 source of the lead in Westgate Trailer Park or
 10 King Acres?
 11 A. No.
 12 Q. Do you know what the soil lead levels
 13 in the Byars' house beyond Bent Creek is, 103
 14 Bent Creek Drive?
 15 A. I don't recall the exact level, no.
 16 Q. Well, do you know if it's over
 17 500 parts per million?
 18 A. I believe -- I would need to look at
 19 the consultant's report to be certain, but my
 20 recollection is that it is below 500 parts per
 21 million.
 22 Q. Okay. Which consultant's report are
 23 you relying on?
 24 A. One of the Fletcher Group reports,

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1 which summarizes all of the sampling which has
 2 been done in King Acres.
 3 Q. Okay.
 4 A. That's the report I would need to
 5 look at, one of those reports.
 6 Q. Well, have you looked at Jack
 7 Fanning's report?
 8 A. I'm sorry, who?
 9 Q. Jack Fanning.
 10 A. I don't recognize that name.
 11 Q. Okay. Let me show it to you. It
 12 should be in this pile.
 13 MR. GEDDIE: That's the report
 14 that was done for your law firm?
 15 MR. MULLMAN: Yes.
 16 MR. GEDDIE: General Engineering
 17 Labs.
 18 (Whereupon, Exhibit 3 was marked
 19 for identification.)
 20 BY MR. MULLMAN:
 21 Q. Have you given this report to The
 22 Fletcher Group or any of your other consultants?
 23 A. Prior to yesterday, I had never seen
 24 this report.

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1 Q. So you didn't look at this during the
2 Smith litigation?
3 A. Not that I recall.
4 Q. Okay.
5 A. I note that the date on the signature
6 page is January 26, 1999. I don't recall the
7 date of the settlement in the Smith litigation.
8 Q. Well, let's go to Table 1, Soil Test
9 Results.
10 A. Is that at the end of the text?
11 Q. It's kind of about ten into it.
12 A. I see that page.
13 Q. Okay. Do you see the results for
14 103 Bent Creek Drive?
15 A. Yes.
16 Q. Do they range from 104 to 2,690 parts
17 per million?
18 A. That is what Table 1 of this exhibit
19 says, yes.
20 Q. Okay. Going to the next page. This
21 is Wipe Test Results from inside the attic of
22 103 Bent Creek Drive, and it shows, and correct
23 me if I'm wrong, 944 parts per million in
24 Mr. Byars' house, correct?

1 lead levels in its soil that exceed the cleanup
2 level that DHEC has established at Westgate
3 Trailer Park?
4 A. If the data in the General
5 Engineering report is correct, the answer is
6 yes.
7 Q. Okay. And you're not aware of any
8 report by any consultant such as Rogers &
9 Calicott, Paul C. Rizzo & Associates, The
10 Fletcher Group or Jeff Lead, that discusses soil
11 results at Mr. Byars' property more than 400
12 parts per million?
13 A. Not that I recall sitting here right
14 now, but I would need to look at the Fletcher
15 Group report, which summarizes all prior
16 sampling data, soil sampling data in the King
17 Acres area to be certain.
18 Q. Are you aware of any complaints by
19 Mr. Bobby Byars about surface runoff coming f
20 Exide facility onto his property between 1987
21 and 1994?
22 A. I have seen documents evidencing
23 Mr. Byars' concerns, as you describe them, in
24 the late '80s and early '90s. I don't recall

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1 A. That's what Table 2 states, yes.
2 Q. Okay. Do you have any opinion about
3 why the lead dust results inside the home would
4 be so high?
5 A. First, I would need an expert to tell
6 me whether the analysis is valid; but assuming
7 it is, I would need an expert to answer that
8 question.
9 Q. Okay. So you don't have an opinion?
10 A. I have no opinion.
11 Q. Okay. Would you agree that
12 Mr. Byars' house has higher lead readings in the
13 soil than what DHEC wants cleaned up at Westgate
14 Trailer Park?
15 A. I would not, because DHEC has not
16 told us what the cleanup level is at Westgate
17 Trailer Park.
18 Q. I thought they determined that they
19 wanted 400 parts per million?
20 A. I'm sorry. I was thinking King Acres
21 and Westgate Trailer Park.
22 Could you either restate the question
23 or can the court reporter read it back?
24 Q. Yeah. Does Mr. Byars' property have

1 the exact dates of those correspondence.
2 Q. Okay. When you say Mr. Byars, that
3 not the Mr. Byars that's involved in this
4 lawsuit, though, correct?
5 A. The correspondence I have seen, I
6 believe, is from Bobby Byars, but I'd need to
7 look at that correspondence to be certain.
8 Q. Okay. Let me show you this newspa
9 article.
10 A. Do you want to mark this, just so
11 it's clear for the record?
12 Q. Yes.
13 (Whereupon, Exhibit 4 was marked
14 for identification.)
15 BY MR. MULLMAN:
16 Q. This is an article that came from the
17 Greenville News, September 20, 1999, and i
18 about the attorney, Gary Poliakoff, writing t
19 letter to DHEC. It has a quote in here from
20 you, Mr. Levine, saying the letter is both
21 outrageous and incorrect. Do you remembe
22 telling the reporter that?
23 A. Yes, but I don't recall whether the
24 quote was given to the reporter for the

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1 Greenville News or the Spartanburg Herald.
2 Q. Okay. Fair enough.
3 A. But the quote is accurate.
4 Q. Okay. Now, what part of that letter
5 is outrageous and incorrect? And here's the
6 letter for you.
7 MR. MULLMAN: We'll mark that
8 as --
9 Actually, why don't we just make
10 the whole thing 4. That might be easier.
11 These are the exhibits that went along with
12 the letter.
13 THE WITNESS: You're referencing
14 a letter from Poole & Associates. There's
15 a handwritten date on the top, September 3,
16 1999. At the bottom of the first page it
17 says Page 1 of 18, and then there's a
18 series of documents bound by a rubber band.
19 As I understand it, for the record, that
20 will be now part of Exhibit 4?
21 BY MR. MULLMAN:
22 Q. Yes.
23 A. What is both outrageous and incorrect
24 about the letter from Mr. Poliakoff, is that the

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1 implication that Exide Corporation set out in
2 any deliberate way to harm anyone, adult or
3 child, whether working at the facility in Greer
4 when it was in operation or living in the
5 vicinity of that facility.
6 Q. And where in the letter does it say
7 that?
8 A. The last sentence of the first
9 paragraph states, quote, Our review indicates
10 two decades of willful abuse by Exide and its
11 predecessor, and then continues on for the
12 remainder of the sentence.
13 I understand the term "willful abuse"
14 in the context of the other allegations made in
15 the letter to imply what I stated in my previous
16 answer.
17 Q. Okay. So none of the factual
18 information, you would say, is incorrect?
19 A. No. I would say the factual
20 information is incorrect, at least some of it.
21 Q. Okay. Well, which ones?
22 MR. GEDDIE: Counsel, I mean,
23 what are we doing here? This is -- why
24 don't you refer him to what's --

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1 MR. MULLMAN: I'm asking him what
2 he thinks is so outrageous and incorrect
3 about our letter. I don't see anything
4 wrong with that. He made the statement.
5 I'm asking him to back it up.
6 MR. GEDDIE: All right. He just
7 backed it up.
8 MR. MULLMAN: Well, what's
9 incorrect in this letter? I mean, all the
10 documents --
11 MR. GEDDIE: Do you want him to
12 read an 18-page letter and tell you what he
13 disagrees with in a letter from your law
14 partner to the newspaper or to DHEC?
15 BY MR. MULLMAN:
16 Q. Yes.
17 A. Sitting here right now, I can't give
18 you every single factual inaccuracy in this
19 18-page letter; however, I do recall at least
20 some of the inaccuracies. Specifically where
21 they occur in the letter would take me a few
22 minutes to locate, but let me take that time to
23 do that.
24 The letter on Page 3 in boldface

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1 says, boldface in all capitals, says, "Why was
2 there virtually no enforcement by DHEC and no
3 attempt to remediate during the above period?
4 Pardon me. During the above decade?"
5 I'm not sure if that's the section of
6 the letter, but there's a section of the letter
7 where the implication is that there was no
8 effort to address impacted groundwater in the
9 vicinity of the facility until well past 1987,
10 when, in fact, the first recovery wells were
11 installed -- pardon me, the first monitoring
12 wells were installed in the late '70s or early
13 '80s under DHEC requirements and supervision,
14 and the groundwater recovery process began in
15 the early 1980s. That is one inaccuracy that
16 comes to mind in this letter.
17 Q. How did you find out about this
18 letter to DHEC?
19 A. It was provided to me by a reporter
20 for the Spartanburg Herald, who called and asked
21 me for my response to it.
22 Q. And did she include for you the
23 attachments?
24 A. She did not. As I said, she was

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1 calling for a response to a letter that we were
2 not copied on and was kind enough to at least
3 give it to us before asking for a response.

4 Q. So you didn't have the exhibits with
5 you, the attachments?

6 A. At that time, no, and nothing I have
7 seen since you provided the attachment to
8 Mr. Geddie in the last week -- I had the chance
9 to look at them yesterday. Nothing in those
10 attachments would change my analysis of the
11 letter.

12 Again, I can't, sitting here right
13 now, tell you every single inaccuracy. I do
14 recall detailing them to the reporter at that
15 time.

16 Q. Oh, so you told the reporter what you
17 thought was outrageous and incorrect?

18 A. Well, I've already described to you
19 what I think was outrageous and incorrect. I
20 also gave her four or five specific examples
21 where there were factual errors of the type that
22 I just described relating to the commencement of
23 the groundwater treatment system.

24 Q. Okay. We can move on then.

1 no. That would require an expert.

2 Q. Do you know if Carl Howell was fir
3 or did he quit the employment of Exide?

4 A. Mr. Howell resigned.

5 Q. Voluntarily or --

6 A. Yes, voluntarily.

7 Q. Who are the other members, beside
8 Neal Lebo, of the Environmental Operation
9 Department?

10 A. Mr. Fred Ganster and our new safe
11 manager, who also reports to Mr. Lebo. His
12 first name is Kaiya, K-A-I-Y-A, I believe.
13 don't recall his last name. In addition, the
14 Industrial Health Laboratory in Philadelphia
15 reports to Mr. Lebo.

16 Q. And who runs that, Bill Pallies,
17 P-A-L-L-I-E-S?

18 A. Yes, correct.

19 Q. And is Bill Frear still there?

20 A. Mr. Frear is still employed by Exi
21 Corporation, yes.

22 Q. Okay. Where is he employed?

23 A. In Reading, Pennsylvania.

24 Q. As what?

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1 MR. MULLMAN: Actually, why don't
2 we take a break.

3 MR. GEDDIE: All right.

4 (Whereupon, a recess was taken.)

5 BY MR. MUELLMAN:

6 Q. Has Exide offered to clean up King
7 Acres to 500 parts per million?

8 A. We have, in the past, made that offer
9 to DHEC, yes.

10 Q. Okay. And what was DHEC's response?

11 A. That they did not want to address
12 King Acres until Westgate was taken care of.

13 Q. Now, Exide owns 17 lots in King
14 Acres?

15 A. I know we own more than ten lots. I
16 don't know the exact number.

17 Q. Now, Exide can voluntarily go and
18 clean up those lots to whatever level they want,
19 correct?

20 A. It could.

21 Q. Do you have an opinion as to what
22 level of lead in soil is safe for children to
23 reside or play in?

24 A. I do not have an opinion as to that,

1 A. Director of Global Risk Management.

2 Q. Global Risk Management? What is
3 that?

4 A. Mr. Frear is responsible for managing
5 all of the company's insurance programs, such
6 its workers' compensation, automobile liability
7 general liability, property coverage, and in
8 that function, monitors fire safety, protection
9 of plant property and equipment, and workers'
10 compensation related issues, as well as some
11 product liability matters.

12 Q. Do you know the amount of money Ex
13 has paid the State of South Carolina for fines
14 related to environmental operations or worke
15 comp violations, OSHA violations, things of
16 nature, throughout the '80s and '90s? Well,
17 since 1987, we'll say.

18 A. I'm not certain that -- there are
19 fines of at least OSHA violations. I know fir
20 have been paid over the years. I don't know
21 exact amount of --

22 Q. Okay.

23 A. -- OSHA violations by the State of
24 South Carolina.

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1 Q. What about fines related to DHEC or
2 EPA?
3 A. I know that there have been civil
4 penalties assessed by DHEC at various times over
5 the period you've described. I don't know the
6 exact amount. I'm not aware of any penalties
7 paid to EPA during that period.
8 Q. I think I might have asked you this
9 before. I'm sorry. So you're not aware of any
10 expert or consultant hired by Exide to determine
11 the source of the lead in King Acres or Westgate
12 Trailer Park?
13 A. We have not asked any expert, to my
14 knowledge, to identify the source of the lead in
15 either of those locations.
16 Q. And have you hired any expert or
17 consultant to figure out what a safe level of
18 lead in soil is for children in Westgate or King
19 Acres to reside in or play in?
20 A. Yes.
21 Q. Okay. And what was the -- who was
22 the consultant and what did they say?
23 A. The consultant was Advanced Geo
24 Services in both cases. At Westgate, the

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1 analysis required AGC to import data from
2 another site because the data which DHEC
3 supplied did not allow for input into the IEUBK
4 model.
5 With that imported data, AGC
6 concluded that a level between, I believe it
7 was, 520 and 700 would be protective of human
8 health in the environment. Excuse me. It would
9 be protective of blood lead impacts at Westgate.
10 AGC is in the process of, or I believe actually
11 has completed, the collection of data necessary
12 to run the model for King Acres, and, therefore,
13 there is no answer yet for King Acres.
14 Q. Okay. What other site did they use?
15 A. I don't recall. That would be in
16 AGC's correspondence with DHEC.
17 Q. And DHEC did not accept that because
18 the default ratio they used was incorrect?
19 A. DHEC did not review that model.
20 Q. Okay. I'm talking the one for
21 Westgate, not King Acres.
22 A. That's correct. DHEC did not review
23 that model.
24 Q. So there was -- I mean, are you aware

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1 of anybody complaining about AGC's default
2 parameter input of .70 instead of .25?
3 A. I don't recall what the number was.
4 Mr. Kevin Koporec, EPA Region 4, indicated more
5 or less that Region 4 would not permit what I
6 would call imported data for purposes of
7 calculating a site-specific risk assessment.
8 Q. And you don't know what DHEC's
9 position on that is?
10 A. DHEC's position is to adopt EPA's
11 position, as I understand it.
12 Q. Has Exide conducted any study or
13 health report to determine the health effects of
14 lead to children in King Acres or Westgate
15 Trailer Park?
16 A. No.
17 Q. Do you know how many children live in
18 Westgate Trailer Park and in King Acres?
19 A. No.
20 Q. Do you know how many homes are in
21 King Acres subdivision?
22 A. I don't recall the exact number.
23 Q. And I think you stated before, Exide
24 only rents one home in King Acres?

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1 A. That's correct.
2 Q. Do you know who lives in 105 Bent
3 Creek Drive?
4 A. The lease of that property was
5 terminated. I don't know what the name of the
6 tenant was.
7 Q. Okay. What about 107?
8 A. The lease there was terminated, as
9 well. I don't know the name of the tenant.
10 Q. Do you know when they were
11 terminated?
12 A. Within the last three to six months,
13 approximately.
14 Q. Why were they terminated?
15 A. Exide does not wish to be in the
16 business of leasing real estate for residential
17 purposes or, for that matter, leasing real
18 estate at all.
19 Q. Well, do you know what's going to
20 happen to those homes?
21 A. There are no current plans.
22 Q. Has Exide attempted to sell the
23 property that is in King Acres subdivision that
24 they own?

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1 A. Exide has discussed a sale of some of
2 that property, yes.
3 Q. Have they attempted to sell the
4 property where the facility is located, the old
5 Exide Corporation?
6 A. We are marketing that property, yes.
7 Q. When was the first time residents of
8 King Acres subdivision complained to Exide about
9 lead contamination?
10 A. I don't know.
11 Q. Do you routinely file Freedom of
12 Information requests to EPA and DHEC?
13 A. No.
14 Q. Do you have an agreement with those
15 two regulatory agencies that you will get
16 documents that are related to Exide facility in
17 Greer?
18 A. No.
19 Q. Did Exide give any warnings to the
20 people who leased the homes in King Acres about
21 the allegations or complaints of lead
22 contamination?
23 A. The only lease that I was involved
24 in, which is the lease to the current tenant, in

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1 answer to that question is yes.
2 Q. And you don't know who made the
3 decision to lease the property before you became
4 the authority to make that decision?
5 A. No, I don't.
6 Q. Do you have an opinion as to who
7 might have given permission to rent the
8 properties in King Acres?
9 A. It would be nothing more than a
10 guess.
11 Q. Okay. The homes that you own in
12 Exide -- I mean that Exide owns in King Acres,
13 have you done wipe samples to figure out the
14 lead dust levels?
15 A. I'm not aware of any such sampling.
16 Q. Do you know what the safe level of
17 lead dust in a home is?
18 A. No, I do not. Again, that's
19 something I would rely on an expert for.
20 Q. And when you say expert, are you
21 talking about an outside expert or somebody who
22 is an expert inside Exide?
23 A. It depends on the question.
24 Sometimes I'm relying on in-house experts for

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1 something. Other times, I'll rely on outside
2 experts like AGC and The Fletcher Group.
3 Q. Okay. Before, you stated that you
4 believe Exide is a significant contributor to
5 the lead contamination in Westgate and King
6 Acres, correct?
7 A. Yes.
8 Q. Do you have an opinion about the
9 pathways?
10 A. I do not. I would defer to experts
11 in those fields.
12 Q. Have you hired Dr. Shippen to review
13 the health records of any of the children in
14 Westgate Trailer Park that had elevated lead
15 levels?
16 A. Dr. Shippen was not hired
17 specifically for that purpose, no.
18 Q. He is retained by Exide as their
19 health doctor?
20 A. He is a medical consultant on an
21 ongoing basis, yes.
22 Q. And has he reviewed those records of
23 those kids in Westgate Trailer Park that allege
24 that they have been injured by lead?

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1 A. No.
2 Q. Have you asked Dr. Shippen to do a
3 review of the medical literature about the
4 health effects of lead on children?
5 A. No.
6 Q. Well, who do you rely on to inform
7 you about the health effects of lead on
8 children?
9 A. I rely upon the published government
10 standards to determine what levels are safe, as
11 a general matter, and rely upon experts when
12 calculating a site-specific level safe for
13 children in the area.
14 Q. Well, have you retained any experts
15 to figure out the health effects of lead on
16 children in Westgate Trailer Park?
17 A. No.
18 Q. What about in King Acres?
19 A. No.
20 I assume when you asked about the
21 health effects of children in various locations,
22 you're not talking about what level of soil is
23 safe, but what the impact --
24 Q. Yes.

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1 A. -- if any, on children is?
 2 Q. You are exactly correct.
 3 A. Then my answer is correct.
 4 Q. And you are relying on AGC to
 5 determine what the safe level is at Westgate
 6 Trailer Park for children, correct?
 7 A. I'm relying on AGC to calculate what
 8 that number would be, using EPA approved models
 9 and recognizing that we will not be able to
 10 implement that level unless DHEC approves of it.
 11 Q. Okay. Are you aware of any
 12 conversations or correspondence between Exide
 13 and Mark Byars?
 14 A. I'm not aware of any correspondence.
 15 Q. Do you believe that the lead
 16 contaminating Mr. Byars' property came from
 17 Exide?
 18 A. I don't know. I don't have an
 19 opinion one way or the other on that.
 20 Q. You don't know if they're a
 21 significant contributor to the lead on
 22 Mr. Byars' property?
 23 A. I'm not an expert in the field, but
 24 it would not surprise me if Exide is a

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1 contributor to the levels of lead found on
 2 Mr. Byars' property.
 3 Q. You mentioned a compromise between
 4 Exide and EPA related to the costs of
 5 remediation done earlier. I thought it was
 6 1994. I think you thought it was earlier than
 7 that.
 8 A. First of all, I don't think I called
 9 it a compromise.
 10 Q. Okay.
 11 A. It was a settlement of a contested
 12 matter.
 13 Q. Okay. A settlement?
 14 A. I believe that the cleanup for which
 15 the claim -- the cost claim was made, was in
 16 '93.
 17 Q. Okay. And the settlement, do you
 18 know what the settlement was?
 19 A. Yes.
 20 Q. Okay. Could you tell us, or is it
 21 confidential?
 22 A. I believe it would be public
 23 knowledge, certainly upon settlement being
 24 finalized.

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1 Q. Okay. Well, can you tell us what it
 2 is?
 3 A. I don't recall the exact number, but
 4 Exide has agreed to pay approximately \$175,000.
 5 Again, I just -- I can't recall the exact
 6 number.
 7 Q. And that's about half of what they've
 8 asked Exide to pay?
 9 A. Approximately.
 10 Q. You were arguing or discussing with
 11 EPA that the statute of limitations had run on
 12 that cost recovery action, correct?
 13 A. That was one of the arguments we
 14 asserted as to a part of the past cost claim,
 15 yes.
 16 Q. And why wasn't that statute of
 17 limitations argument successful?
 18 A. It's not that it wasn't successful.
 19 It's that Exide made a decision to settle the
 20 matter with EPA and EPA made a decision to
 21 settle with us.
 22 Q. Okay.
 23 MR. GEDDIE: We'll be glad to
 24 quote your legal opinion, that it should

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1 have been zero.
 2 BY MR. MULLMAN:
 3 Q. Do you know when the lots in King
 4 Acres were purchased?
 5 A. Not specifically, no.
 6 Q. Okay.
 7 A. Except for Ms. Poteat's property.
 8 Q. Now, in the discovery responses it
 9 was stated -- Exide stated that some of the lots
 10 were purchased because of a groundwater recovery
 11 system, correct, if you recall?
 12 A. I do recall, and that is correct.
 13 Q. Okay. When Exide purchased those
 14 lots from the previous owners, were those owners
 15 alleging lead contamination on those lots?
 16 A. Not to my knowledge.
 17 Q. And do you know who made the decision
 18 to purchase the lots, besides Shirley Poteat's,
 19 which you made?
 20 A. I don't know.
 21 Q. You don't know.
 22 Have you had any correspondence or
 23 conversations with EPA to attempt to stop the
 24 final draft of the NEIC?

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1 A. No.
2 Q. Do you believe that it's appropriate
3 that the NEIC conduct a final report?
4 A. I don't have an opinion one way or
5 the other.
6 Q. Has Exide or had Exide had previous
7 negotiations with the previous owner of the
8 property that is related to this lawsuit?
9 A. I don't know.
10 Q. How many lawsuits has Exide been
11 involved in at the Greer facility related to
12 lead contamination or lead exposure?
13 A. Prior or pending lawsuits?
14 Q. Prior.
15 A. I know there are some, I don't know
16 the number, workers' compensation claims. Other
17 than that, I'm only aware of the Smith case,
18 previously brought by your office.
19 Q. Okay. Well, you're aware of the
20 Miller case, correct?
21 A. That's correct, both the Miller and
22 Hight cases, and Poteat. That is correct,
23 you're right.
24 Q. Have you been involved in any of the

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1 lead industries association seminars?
2 A. No, I have not.
3 Q. Do you know how much money Exide
4 contributes to the lead industries association?
5 A. No.
6 Q. Do you know how much political
7 contributions Exide gave to South Carolina
8 candidates in 1994?
9 A. I don't believe Exide made any
10 political contributions to South Carolina
11 candidates in 1994 or any other year.
12 Q. When was the date of closing for the
13 Greer facility?
14 A. To the best of my recollection, all
15 operations in the facility ceased on or about
16 December 1996. For several months prior to that
17 date, the only operations were formation, was
18 formation.
19 Q. When did they stop producing
20 batteries?
21 A. I don't recall the exact date, but it
22 was, I think, sometime in the summer of 1996.
23 Q. Do you know the other sites that
24 Exide has cleaned up the lead around their site,

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1 their facility?
2 A. In Greer?
3 Q. No, around the nation. Are there
4 other sites that you had to remediate around the
5 facility.
6 A. We did a cleanup in a residential
7 neighborhood called Cadillac Heights in Dallas,
8 Texas. That neighborhood was adjacent to a
9 secondary lead smelter owned and operated by
10 Dixie Metals Company, which was a subsidiary of
11 General Battery Company.
12 Q. Do you know what the cleanup level
13 there was?
14 A. I do not.
15 Q. Okay. Any other places?
16 A. That's the only cleanup we have
17 performed adjacent to one of our own facilities
18 that I can recall right now.
19 Q. And do you know when that was?
20 A. Mid-1990s. I can't recall the exact
21 year.
22 Q. And --
23 A. I'm sorry. Your question was
24 off-site cleanup, correct?

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1 Q. Yeah.
2 A. Not on-site?
3 Q. Yeah.
4 A. Okay.
5 Q. Now, where is Cadillac Heights?
6 A. Dallas, Texas.
7 Q. Dallas. I thought you said that, I'm
8 sorry.
9 MR. MULLMAN: I don't know if
10 this was included in yours. I think we
11 just got this, actually.
12 (Whereupon, Exhibit 5 was marked
13 for identification.)
14 BY MR. MULLMAN:
15 Q. I realize that you weren't copied on
16 this. I just wanted to ask you if you disagree
17 with some of the things in this letter.
18 A. This is a two-page document that's
19 single spaced. Do you want me to read the
20 entire thing?
21 Q. Yeah, read it. Not out loud. I'm
22 saying, read it for your review.
23 A. The first -- it appears to be a
24 series or, quote, unquote, string of e-mail

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1 messages. The first one is from Elmer Akin at
2 Region 4, which I assume means EPA Region 4. It
3 doesn't say to whom it is intended. It does say
4 Ralph, so I guess that's Ralph Howard at EPA.
5 MR. GEDDIE: Counsel, where did
6 you get this?
7 MR. MULLMAN: Freedom of
8 Information Act request.
9 THE WITNESS: Well, taking them
10 one at a time, the first message is the
11 only one I've read so far. I understand
12 that to be EPA's position; that is to say
13 that -- well, no, strike that. I would not
14 say that. I understand it to be the
15 position of some individuals at EPA. I
16 believe it is inconsistent with EPA's own
17 guidance.
18 BY MR. MULLMAN:
19 Q. Okay. Well --
20 A. That's just the first --
21 Q. Yeah. I'll quicken the process here,
22 because you don't have to read it all. Down
23 here, the -- actually, the second to the last
24 paragraph.

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1 A. On the first page?
2 Q. On the first page. "As to why --"
3 That one I'm most interested in.
4 A. Okay. This is from Ralph Howard at
5 EPA. It says -- the first word of the text is
6 Reuben, so I assume it's to Reuben Bussey at
7 EPA, in-house counsel.
8 Okay. I've read that paragraph.
9 Q. Okay. Does it indicate to you that
10 one of the factors that DHEC and Mr. -- I mean
11 Dr. Marino is using for the cleanup level is
12 that there are actual significantly elevated
13 blood levels at Westgate Trailer Park?
14 A. The phrase, quote, actual
15 significantly elevated blood lead levels here,
16 close quote, appears in the text, yes.
17 Q. I know we were discussing the factors
18 before, and I asked you were one of the factors
19 DHEC was using the fact that there were elevated
20 lead levels in children. Does this change your
21 mind now, that that was one of the factors that
22 DHEC was looking at?
23 A. As I think I said the last time, DHEC
24 was looking at blood lead levels, but never ran

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1 the model itself and never asked EPA to run the
2 model using those blood lead levels. The blood
3 lead levels which DHEC did provide to us in the
4 summer of 1998 did not support a lower cleanup
5 level, according to AGC's analysis.
6 Q. Okay.
7 A. So I guess the short answer to your
8 question is, it does not change my answer.
9 Q. Okay. Does EPA, from this paragraph,
10 at least, sound like they're agreeing with DHEC,
11 that they prefer the 400 parts per million
12 level, as we do?
13 MR. GEDDIE: I object to the form
14 of the question.
15 THE WITNESS: Mr. Howard
16 states -- seems to state as much in this
17 e-mail message. Whether Mr. Howard either
18 is authorized or qualified to speak for
19 EPA, I can't say.
20 BY MR. MULLMAN:
21 Q. Okay.
22 A. And as I've said, to the extent that
23 Mr. Howard takes that position, I think it's
24 inconsistent with EPA's own written guidance

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1 documents.
2 MR. MULLMAN: Actually, I don't
3 know if I'm going to make that an exhibit
4 since it's not to or from him.
5 MR. GEDDIE: It's already marked,
6 so you might as well leave it.
7 MR. MULLMAN: Sounds fine. Might
8 as well leave it.
9 BY MR. MULLMAN:
10 Q. Have you looked for a document called
11 Palmetto Air and Water Balance Report, Spring of
12 1994?
13 A. Could you give me the name again?
14 Q. The Palmetto Air and Water Balance
15 Report, Spring of 1994.
16 A. I don't recall hearing that name
17 before, so I can't answer.
18 Q. Have you looked for the Soil Erosion
19 and Sedimentation Plan that was requested in the
20 Smith litigation?
21 A. If it was requested in the Smith
22 litigation, I attempted to locate it.
23 Q. Okay.
24 MR. GEDDIE: Counsel, if you have

<p style="text-align: right;">82</p> <p>1 a list of documents that you think were not 2 produced in prior litigation, if you'll 3 give me that list, I'll assure you, we will 4 make a renewed effort to find it. 5 MR. MULLMAN: I think we -- part 6 of our request to produce has a list of 7 those documents. 8 MR. GEDDIE: Okay. 9 MR. MULLMAN: And they're not due 10 for another week yet or two. 11 BY MR. MULLMAN: 12 Q. Are you familiar with this 13 Preliminary Site Assessment by EPA, December 14 1996? 15 A. I have seen this as recently as 16 yesterday, because this is, I believe, one of 17 the documents that you produced to Mr. Geddie, 18 but I do not recall seeing it prior to that, 19 prior to yesterday. 20 Q. Okay. On Page 4. 21 MR. GEDDIE: This is No. 6? 22 MR. MULLMAN: Yes. This will be 23 No. 6. 24 (Whereupon, Exhibit 6 was marked</p>	<p style="text-align: right;">84</p> <p>1 report for Westgate, which was submitted to DHEC 2 by Exide in January 1997. 3 Assuming that's the case, that report 4 identified the sampling and analysis methods 5 that were employed by, I believe it was, The 6 Fletcher Group, and identified lead levels that 7 were determined following those procedures. 8 Q. Okay. And would that be a CERCLA 9 site, Federal Superfund? Is that what they mean 10 by that? 11 A. I don't recall whether the report was 12 submitted as a Federal Superfund or State 13 Superfund program. 14 Q. So before giving this document, or 15 getting this document from Gray Geddie the other 16 day, you've never seen this or you don't recall 17 it? 18 A. I don't believe I've seen this 19 document before, no. 20 Q. Okay. Well, then, I'm not going to 21 ask you about it then. 22 MR. MULLMAN: It might be easier 23 if we take the break now. 24 MR. GEDDIE: That's fine.</p>
<p style="text-align: right;">83</p> <p>1 for identification.) 2 THE WITNESS: Page 4, including 3 the first page? 4 BY MR. MULLMAN: 5 Q. Yes. 6 A. I see that page. 7 Q. Okay. It says here, on the third 8 paragraph after the Introduction/Executive 9 Summary, "Because of high levels of lead 10 detected on-site, the Westgate Mobile Home site 11 would normally receive a high priority for 12 further Federal Superfund activity," correct? 13 Is that what it states? 14 A. That's what it states. 15 Q. And then it goes on to talk about the 16 remedial investigation performed by Exide 17 Corporation under DHEC Consent Order 96-12-HW. 18 Do you know what that remedial investigation 19 said? 20 A. In general terms, yes, not 21 specifically. 22 Q. Okay. Generally, what did it say? 23 A. It identified lead levels in the -- 24 I'm assuming that's the remedial investigation</p>	<p style="text-align: right;">85</p> <p>1 (Whereupon, a luncheon recess was 2 taken from 12:55 until 2:05 p.m.) 3 MR. MULLMAN: Let's make this -- 4 this is a September 28, 1995 letter from 5 the EPA to Mr. Levine. We'll make this 6 Plaintiff's Exhibit 7. 7 (Whereupon, Mr. Robert L. 8 Collings, Esquire joined the deposition.) 9 (Whereupon, Exhibit 7 was marked 10 for identification.) 11 BY MR. MULLMAN: 12 Q. Do you remember receiving this 13 document? 14 A. I don't remember receiving it, but it 15 is addressed to me and I probably did get it on 16 or about the date. 17 Q. Okay. Do you agree with the EPA's 18 assertion that the Exide facility located in 19 Greer, South Carolina violated the Clean Air 20 Act's New Source Performance standards? 21 A. No, I do not. 22 Q. Okay. And why not? 23 A. I do not believe that a source 24 becomes a New Source under subpart KK of the Air</p>

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1 Regulations Part 6040 CFR.
 2 Q. Okay. Did you enter into a Consent
 3 Order related to this alleged violation?
 4 A. With EPA?
 5 Q. Yes.
 6 A. No.
 7 Q. Okay. All right. Let's proceed.
 8 MR. MULLMAN: This will be
 9 Exhibit No. 8.
 10 (Whereupon, Exhibit 8 was marked
 11 for identification.)
 12 THE WITNESS: My answer with
 13 regard to EPA may have been incomplete. I
 14 do not take the -- it is not my position
 15 that an old source can never become a new
 16 source. As to the circumstances under
 17 which an old source can become a new
 18 source, I differ with the position of the
 19 EPA as stated in this letter.
 20 BY MR. MULLMAN:
 21 Q. And this is a February 28, 1996 fax
 22 which includes your name. Do you remember
 23 seeing this fax and this letter from Neal Lebo?
 24 A. I don't remember receiving it, but

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1 I'm sure I did receive it, based on the cover
 2 page.
 3 Q. Okay. The next page is a draft
 4 letter to DHEC, Mr. Tilford.
 5 A. I'm sorry. If I could note, the
 6 cover page says pages including cover nine, and
 7 I think there were six pages here, so it may
 8 just be that -- it seems there's something
 9 missing, but as I say, I'm sure I received
 10 whatever was faxed from Mr. Lebo.
 11 Q. I think that the end is just the
 12 first page of the Consent Order. I don't think
 13 we have the whole Consent Order.
 14 A. Okay.
 15 Q. The second page talks about their Air
 16 Systems testing at Exide Corporation's
 17 manufacturing facility on stacks No. 2, 3, 4 and
 18 5. Do you recall those test results in this
 19 testing done?
 20 A. I recall that there was testing done
 21 in or about this time. I don't recall what the
 22 results were, specifically, other than what the
 23 result was.
 24 Q. Okay. And this test result, do you

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1 know when it was done, these tests?
 2 A. I have no independent recollection,
 3 but I would assume it was done shortly before
 4 July 31, 1995, which is the date that the draft
 5 was received.
 6 Q. Okay. And did the production
 7 decrease between July '94 and July '95?
 8 A. I don't know.
 9 Q. Okay. On the second paragraph, it
 10 states, quote, It should be noted that, while
 11 production during all test runs was
 12 representative of current plant operations, the
 13 daily production requirements on the Greer
 14 facility have been significantly curtailed over
 15 the past six months. Would you agree that
 16 that's what it says?
 17 A. I have no independent knowledge. I
 18 have no reason to doubt that that's the case.
 19 Q. Were tests done on the stacks when
 20 production was at its maximum?
 21 A. I don't know. It would -- it would
 22 state what -- the production level would be
 23 stated in the report of the consultant who did
 24 the tests.

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1 Q. Okay. Do you know if Air Systems
 2 Testing, the consultant that is mentioned in
 3 here, ever informed Exide that its emissions
 4 violated the EPA and DHEC standards?
 5 A. I don't believe they ever so
 6 communicated, and I don't believe that, in fact,
 7 the facts presumed in your question are true.
 8 Q. Okay.
 9 MR. MULLMAN: This will be No. 9.
 10 MR. GEDDIE: What's the date on
 11 that letter?
 12 MR. MULLMAN: It's March 19,
 13 1997, EPA.
 14 (Whereupon, Exhibit 9 was marked
 15 for identification.)
 16 BY MR. MULLMAN:
 17 Q. I notice that Page 4 is not attached.
 18 I think it wasn't included and then they faxed
 19 it to us or something.
 20 Have you ever talked to Winston Smith
 21 at EPA?
 22 A. No.
 23 Q. Okay. What about Russ Wright?
 24 A. No.

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1 Q. Okay. Have you ever seen this
2 document before?
3 A. I saw it yesterday, because it was
4 among the documents which your office produced
5 to Mr. Geddie, but I had not seen it previously.
6 Q. Okay. The third line states, "The
7 company --" and I presume they mean Exide --
8 "has completed a Remedial Investigation dated
9 January 1997 in which they drew several
10 conclusions; mainly, that Exide is not
11 responsible for lead deposition in Westgate."
12 Do you agree with that
13 characterization of remedial investigation done?
14 A. No.
15 Q. Okay. Why do you disagree with it?
16 A. The report did not state that Exide
17 was not responsible for lead deposition in
18 Westgate. The report stated that the wide
19 dispersion of lead levels across the Westgate
20 property made a determination of all of the
21 sources of the lead difficult.
22 Q. Okay. Well, what could be done to
23 figure out who is responsible for the lead at
24 Westgate Trailer Park?

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1 A. You would have to ask an expert in
2 that field.
3 Q. Okay. The next page talks about a
4 report: Proposal for Identifying the Specific
5 Source of Lead Emissions in Westgate Trailer
6 Park in Greer, South Carolina, correct?
7 A. That's what it says, yes.
8 Q. And can you read the objective on the
9 next page?
10 A. Do you want me to read what's written
11 here?
12 Q. Yes, please.
13 A. Quote, Identify the source of lead
14 (Pb) deposited within the Trailer Park so that
15 the responsible party can be identified and so
16 remediation can be undertaken as needed by said
17 responsible party. End of quotation.
18 Q. Why would Exide agree to remediate
19 Westgate before the NEICs final report was done,
20 since their objective is to find out who the
21 responsible party is?
22 MR. GEDDIE: If you know.
23 THE WITNESS: Exide did proceed
24 with the cleanup and the investigation of

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1 Westgate because, as I stated earlier, we
2 suspect that we are a contributing source
3 of the lead present at that location.
4 BY MR. MULLMAN:
5 Q. Okay. Does Exide or do you believe
6 that there's another contributing source that is
7 known?
8 A. As I stated earlier, there are a
9 number of possibilities, given the prevalence of
10 lead in the environment all over the country, if
11 not all over the world.
12 Q. Well, can you name some of those
13 possibilities?
14 MR. GEDDIE: He's already done it
15 once. I mean, you want to do it again?
16 MR. MULLMAN: I didn't think he
17 did it.
18 BY MR. MULLMAN:
19 Q. I didn't think you named all the
20 sources.
21 A. No, I said earlier there could be --
22 well, I can't name all of them, but I can name
23 some of them. There are anthropogenic sources,
24 including emissions from lead contaminated --

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1 not lead contaminated -- leaded gasoline. There
2 may be other anthropogenic sources, and lead is
3 a pervasive compound in the natural environment.
4 Those are two, as I mentioned earlier, possible
5 contributing sources.
6 Q. Do you think --
7 A. It could also be people working on
8 automobiles, their own, or those of other
9 people, that could contribute to the presence of
10 lead.
11 Q. And are you relying on any consultant
12 or expert for those, or is that something that
13 you have knowledge of?
14 A. Over the years of reading
15 consultants' reports, I am aware that all of
16 those sources can be sources of lead at a
17 particular location.
18 In addition, as I mentioned earlier,
19 there was sampling that was conducted at
20 Westgate along Old Buncombe Road which showed
21 elevated levels along the roadside as compared
22 to the rest of the property.
23 (Whereupon, Exhibit 10 was marked
24 for identification.)

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1 BY MR. MULLMAN:
2 Q. This is an August 13, 1997 letter to
3 Mr. Lebo. Now, you're not copied on this, but I
4 wanted to ask you if you've ever seen this
5 letter before or if you've ever talked to
6 Mr. Lebo about this letter before?
7 A. I believe I have seen this letter
8 before, but not at the time it was sent to
9 Mr. Lebo.
10 Q. Okay. No. 1 says, "The state has
11 provided Exide with justification for the
12 400 milligrams/kilograms cleanup level in Gary
13 Stewart's letter dated July 1, 1997."
14 That's what it says, correct?
15 A. That is what it says.
16 Q. Do you disagree that the state gave
17 Exide justification to 400 at that time?
18 A. I disagree with that statement. They
19 had not given such justification at that time.
20 Q. Do you recall that Gary Stewart's
21 letter dated July 1, 1997 said that they believe
22 that gave justification?
23 A. I'm sure I've seen Mr. Stewart's
24 July 1 letter, but I don't recall specifically

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1 what that letter says.
2 Q. Okay. No. 2 states, "The depth of
3 the soil removal should be at least six inches,"
4 correct?
5 A. That's what it says.
6 Q. Do you know why DHEC changed their
7 mind and just allowed Exide to do three inches?
8 A. I don't know that DHEC just allowed
9 Exide to do anything.
10 Q. You know what I mean. Do you know
11 why they changed it from six inches to three
12 inches?
13 A. As I said earlier, first of all, I
14 don't know what the thinking of DHEC's mind was,
15 but we did make our consultant available to
16 DHEC's technical personnel, and there was a
17 series of conversations between our consultants
18 and DHEC's personnel as to the merits of the
19 work plan that we had submitted.
20 Q. The soil sampling that The Fletcher
21 Group performed or conducted on behalf of Exide,
22 is that to three inches, six inches, or nine
23 inches, to your knowledge?
24 A. I don't recall. I'd have to look in

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1 the Fletcher Group report.
2 Q. The last line on the first page says,
3 "Exide has conducted all possible investigation
4 options to identify the source of the lead on
5 Westgate Trailer Park."
6 Do you agree with that statement?
7 A. No.
8 Q. Why not?
9 A. I don't think that we have focused
10 very much, if at all, on identifying other
11 sources of lead.
12 Q. Okay. I don't think it says other
13 sources. It says "the source" of the lead.
14 A. Well, I don't believe there is a
15 single source of the lead.
16 Q. Okay. Well, has Exide conducted all
17 possible investigation options to identify any
18 source at the Westgate Trailer Park?
19 A. No.
20 Q. Okay. Moving right along.
21 MR. MULLMAN: April 14, 1998
22 letter. This is Exhibit No. 11. This is
23 to Mr. Lebo.
24 (Whereupon, Exhibit 11 was marked

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1 for identification.)
2 BY MR. MULLMAN:
3 Q. Once again, you weren't copied on
4 this, but do you remember seeing this?
5 A. I have seen this letter before, yes.
6 Q. Okay. In the first line, first
7 paragraph, it talks about the two reasons why
8 DHEC wants cleanup to be 400 parts per million.
9 It says, "First, 1996 surface soil sampling
10 conducted by The Fletcher Group for Exide, as
11 well as other sampling data, indicate the
12 presence of lead contamination in excess of
13 400 parts per million in large delineated areas
14 of the Trailer Park."
15 Do you agree with that, that The
16 Fletcher Group sampling shows lead contamination
17 in excess of 400 parts per million?
18 A. The data presented in The Fletcher
19 Group report does show that there are sampling
20 points in excess of 400 ppm at Westgate.
21 Q. And would that be true for King
22 Acres, too?
23 A. At certain locations, yes.
24 Q. Okay. One of those locations being

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1 Mark Byars' property?
 2 A. I don't recall.
 3 Q. Then it says, "Secondly,
 4 site-specific data indicates the presence of a
 5 continuing exposure pathway as evident by
 6 elevated blood lead levels in residents several
 7 years after the 1995 EPA removal action."
 8 Do you agree with that statement?
 9 A. No.
 10 Q. Okay. Why not?
 11 A. Because we have not received any
 12 data, that I'm aware of, that shows persistent
 13 elevated blood lead levels in residents at
 14 Westgate Trailer Park.
 15 Q. Did Exide ever go out to Westgate and
 16 perform any blood lead testing on the residents
 17 there?
 18 A. No.
 19 Q. Okay. Did DHEC ever ask them to do
 20 that?
 21 A. No.
 22 Q. Are you aware of the public lead
 23 awareness program that was recommended to be
 24 done by DHEC in 1989 through 1991?

1 answered.
 2 BY MR. MULLMAN:
 3 Q. Okay. Well, why not? Why didn't
 4 Exide offer to help the state determine if there
 5 were children getting injured at Westgate
 6 Trailer Park because of lead?
 7 A. First, the state had conducted some
 8 blood lead sampling. Secondly, the state, I
 9 don't believe, ever asked Exide to fund a state
 10 health initiative.
 11 Q. Okay. The last two lines in the
 12 second paragraph, the one right before that,
 13 talks about justifying setting the higher
 14 cleanup goal than 400. Then it goes on to
 15 state, quote, However, since an exposure route
 16 still exists and there's a documented history of
 17 elevated blood lead levels in Westgate
 18 residents, there's no justification at this
 19 site. Therefore, Exide Corporation must conduct
 20 the cleanup to a level of 400 parts per million
 21 total lead."
 22 Is that what it says?
 23 A. That's what it says.
 24 Q. Okay. Now, do you think that that is

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1 A. My recollection is there was some
 2 correspondence between DHEC and Exide personnel,
 3 but the content of that correspondence, I don't
 4 recall, independently.
 5 Q. Well, would it be fair to say that
 6 DHEC was, at least in 1989 through '91,
 7 concerned about the lead at Westgate and the
 8 effect of the lead on children?
 9 MR. GEDDIE: I object to the form
 10 of the question.
 11 THE WITNESS: I don't recall,
 12 independent of looking at the
 13 correspondence, what DHEC's concerns were,
 14 other than that DHEC indicated that they
 15 did not have funding available to do some
 16 of the things that were under discussion.
 17 BY MR. MULLMAN:
 18 Q. And did Exide offer money to help
 19 them fund that?
 20 A. Not that I recall.
 21 Q. Okay. Why not? I mean, wouldn't
 22 Exide be concerned about the children at
 23 Westgate Trailer Park?
 24 MR. GEDDIE: That's not what he

1 justification to Exide to clean it up to 400
 2 parts per million? They're saying that, one, a
 3 exposure route still exists; and two, that
 4 there's a documented history of elevated blood
 5 lead levels. Would you say that that gives
 6 Exide justification to clean it up to 400 parts
 7 per million?
 8 A. No.
 9 Q. Okay.
 10 (Whereupon, Exhibit 12 was marked
 11 for identification.)
 12 BY MR. MULLMAN:
 13 Q. This is a November 6, 1998 letter to
 14 Mr. Wilson from Mr. Lebo, and it shows that
 15 were copied on this. Do you remember receiving
 16 a copy of this letter?
 17 A. I don't remember it, but I have no
 18 doubt that I received it.
 19 Q. Okay. Now, this is talking about an
 20 off-site soil investigation of King Acres,
 21 correct?
 22 A. Yes.
 23 Q. And Exide's position here is that
 24 until cleanup level at the trailer park is

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1 resolved, there would be no purpose to proceed
2 with the expanded study in King Acres, correct?
3 That's what it says?
4 MR. GEDDIE: Well, the letter
5 speaks for itself.
6 BY MR. MULLMAN:
7 Q. Okay. Well, I just wanted to -- we
8 can read the letter then.
9 All right. The second paragraph, the
10 fourth line, it says, "However, until this
11 fundamental issue is resolved, it would serve no
12 purpose to proceed with an expanded study in
13 King Acres," correct?
14 A. That's what it says.
15 Q. Now, why wouldn't it still serve the
16 purpose to sample King Acres to find out the
17 levels?
18 A. Because you'd end up duplicating the
19 work, potentially, by having to go back and
20 resample once the cleanup goal was established.
21 It would not move the ball forward in
22 determining what the cleanup level is.
23 Q. But after they determined the cleanup
24 level at Westgate, you're still doing the

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1 duplicative work, aren't you? I mean, you're
2 not agreeing to do cleanup of 400 in King Acres,
3 right?
4 A. I'm not sure what the question is.
5 I'm sorry.
6 Q. Okay. Well, let's go back. Why did
7 Exide not want to proceed with an expanded study
8 in King Acres?
9 A. As a general matter, when there's
10 already data at a site, a further delineation
11 is -- could very well be a waste of time and
12 money without knowing what we're delineating to,
13 and DHEC has defined the delineation criteria as
14 being equivalent to, or equal to, rather, the
15 cleanup criteria. And so, until we know what we
16 have to delineate to, it seems to be, as I say,
17 a waste of time and money, and, more
18 importantly, it does not advance the ball to
19 getting cleanup done.
20 Q. Okay. So you wanted to resolve the
21 cleanup lead level at Westgate first?
22 A. At Westgate or King Acres?
23 Q. Westgate.
24 A. Yes, sir. Yes, that's correct.

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1 Q. Now, since that issue has been
2 resolved, and correct me if I'm wrong, that
3 issue has been resolved? Exide has cleaned it
4 up to 400 parts per million?
5 A. Correct.
6 Q. How does that affect the cleanup of
7 King Acres?
8 A. Exide's position, as I stated before,
9 is that a cleanup to 400 parts per million is
10 overly protective, and that a site-specific risk
11 assessment should be performed for King Acres.
12 as it should have been performed for Westgate.
13 And DHEC has allowed us the time to do that risk
14 assessment.
15 Q. Okay. But isn't it good that DHEC
16 wants to be overprotective of people, including
17 children, in King Acres and Westgate Trailer
18 Park?
19 MR. GEDDIE: I object to the form
20 of the question.
21 BY MR. MULLMAN:
22 Q. And isn't that something that they're
23 supposed to be doing?
24 MR. GEDDIE: Same objection.

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1 How can he speak to what DHEC ought to be
2 doing?
3 MR. MULLMAN: He negotiates with
4 DHEC.
5 MR. GEDDIE: You and I live in
6 the state, too, but we can't speak for
7 DHEC.
8 BY MR. MULLMAN:
9 Q. Well, wouldn't Exide want to be
10 overly protective of the children in Westgate
11 Trailer Park and King Acres, especially if
12 they're a significant contributor to the lead?
13 A. Exide wants to be protective of all
14 persons, as well as the environment. We do not
15 think it is necessary to be overly protective
16 when there are sound scientific models which
17 have been developed and endorsed by EPA which
18 allow one to determine safe levels, that
19 themselves incorporate many levels of risk
20 reduction, such as safety factors, and,
21 therefore, feel there's no need to go above and
22 beyond those factors endorsed by EPA of insuring
23 that there's a safe level for human health and
24 the environment.

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1 Q. Now, I noticed you mentioned EPA, but
2 isn't DHEC the lead agency here?
3 A. DHEC is the lead agency.
4 Unfortunately, DHEC has not adopted any
5 standards by which one could determine a cleanup
6 level.
7 Q. And DHEC could request Exide to clean
8 it up to 100 parts per million, correct?
9 A. If they have a sound basis in
10 science, fact, and law, sure.
11 Q. Okay. So considering that Exide
12 believes that 400 parts per million is overly
13 protective, why did they agree to clean it up to
14 that level?
15 A. We recognized that DHEC was
16 determined at that point to proceed, however
17 much we thought their proceeding was with or
18 without justification, and recognized that we
19 could achieve the objectives of the cleanup both
20 more quickly and more efficiently, and so
21 decided to do so.
22 Q. Okay. Well, does DHEC seem
23 determined to fund the cleanup at King Acres at
24 400 parts per million?

1 A. I did receive it. I don't
2 specifically recall whether it was attached to
3 this or not, but if it says in the letter it
4 was, I'm sure it was.
5 Q. Okay. On the second page --
6 A. Of the letter?
7 Q. -- of the letter, yes. The second to
8 the last paragraph says, quote, EPA has
9 designated Westgate a 'low priority site,'
10 largely because the State of South Carolina is
11 the lead agency and Exide has indicated a
12 willingness to clean up the contamination.
13 Is that what it says?
14 A. That's what it says.
15 MR. GEDDIE: That's what it says.
16 MR. MULLMAN: Okay.
17 MR. GEDDIE: Yep.
18 BY MR. MULLMAN:
19 Q. Do you believe that this would be a
20 high priority site but for the State of South
21 Carolina being the lead agency? If EPA was
22 lead agency, would this be a high priority?
23 A. I don't know.
24 Q. You didn't have conversations with

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1 MR. GEDDIE: I object to the form
2 of the question.
3 THE WITNESS: I don't know what
4 DHEC intends.
5 BY MR. MULLMAN:
6 Q. Okay. And they haven't told Exide
7 that they want the cleanup at King Acres to be
8 400, have they?
9 A. Not to my knowledge.
10 Q. Okay.
11 MR. MULLMAN: There are two
12 documents here, January 13, 1999, from the
13 EPA, and a memo from Kevin Koporec from the
14 EPA. The reason they're together is that
15 the first one says that the other one was
16 attached. So we'll just make that one.
17 (Whereupon, Exhibit 13 was marked
18 for identification.)
19 BY MR. MULLMAN:
20 Q. Do you remember receiving this
21 letter?
22 A. Yes.
23 Q. Okay. And do you remember receiving
24 the memo from Kevin Koporec?

1 Reuben Bussey related to that?
2 A. Not on this subject, no.
3 Q. Okay. Going to the --
4 A. To be clear, not on the subject of
5 whether Westgate would be a low- or
6 high-priority site.
7 Q. Okay. Going to Kevin Koporec's m
8 do you believe that this gave Exide
9 justification why the cleanup should be 400
10 parts per million?
11 A. No.
12 Q. On the second page, second para
13 it says, "As noted above, 400 parts per millio
14 is the screening level for lead and soil at
15 CERCLA sites. This is based on the EPA
16 Integrated Exposure Uptake and Biokinetic
17 run with model defaults for all exposure
18 parameters other than soil and dust lead
19 concentrations." Correct?
20 A. That's what it says.
21 Q. Now, I think you stated before that
22 AGC was unable to do an IEUBK model, co
23 A. No. What I said was AGC was not
24 given all of the data necessary to do a comp

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1 IEUBK model run without importing data for one
2 parameter.
3 Q. Okay. What parameter was that, do
4 you remember?
5 A. I believe it was house dust, but I
6 can be wrong about that. I'd have to rely on --
7 I'd have to look at the AGC submittal to DHEC to
8 be certain.
9 Q. Well, if the lead is in soil, why
10 would house dust be important?
11 A. As I said before, I am far from an
12 expert in the model or what the parameters are
13 or how they interact with one another. I just
14 know it's one of the parameter inputs.
15 Q. Would you and Exide then defer to AGC
16 on this point?
17 A. We would defer to AGC on any -- on
18 how the model -- how the inputs are used and how
19 the model is run and was run for Westgate.
20 MR. MULLMAN: All right. We'll
21 move on. I'm not sure why, but there's two
22 copies of this letter together. This will
23 be Plaintiff's Exhibit No. 14.
24 (Whereupon, Exhibit 14 was marked

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1 for identification.)
2 MR. MULLMAN: I assume that's how
3 we received it from the EPA, so --
4 MR. GEDDIE: They serve
5 duplicates, too.
6 BY MR. MULLMAN:
7 Q. Do you remember writing this letter
8 to Mr. Bussey at the EPA?
9 A. Yes.
10 Q. It seems in this letter, and, please,
11 I don't want to mischaracterize the letter, that
12 you're kind of frustrated or complaining about
13 the back and forth between EPA and DHEC; is that
14 true?
15 A. That's very true. It was a source of
16 constant frustration for us because it prevented
17 any forward progress on this matter.
18 Q. Could Exide have just taken the lead
19 and cleaned it up at a certain level?
20 A. Exide cannot take the lead agency
21 role because that is one, by statute, reserved
22 for government agencies.
23 Q. Okay. What about in King Acres with
24 property that you own?

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1 A. As I said before, we could physically
2 perform a cleanup, but it would be not one
3 endorsed by any government agency.
4 Q. Okay. Did Mr. Bussey respond to this
5 letter?
6 A. I believe he did. I don't know the
7 date of his response.
8 Q. In the second page, you mention that
9 we would bring our consultant, on the second to
10 the last paragraph. Is that AGC that you're
11 mentioning there or is --
12 A. I'm sorry. Where are you reading
13 from?
14 Q. The second to the last paragraph,
15 second to the last line. Saying, "We would.
16 bring our consultant." Is that AGC that you're
17 talking about?
18 A. That would be AGC, correct.
19 Q. And are you trying to set up a
20 meeting with the EPA people?
21 A. Yes.
22 Q. And at this point, you believe that
23 EPA was the lead agency, or do you believe that
24 DHEC was the lead agency?

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1 A. At the time the letter was written?
2 Q. Yes.
3 A. Well, as I said on the bottom, the
4 first sentence of the third paragraph of the
5 letter, there was a great deal of confusion as
6 to who was the lead agency at that point in
7 time, as there had been in the several prior
8 times.
9 Q. Well, since Gary Stewart's July 1997
10 letter, has EPA and DHEC agreed that 400 parts
11 per million should be the cleanup level?
12 A. EPA has indicated they do not object
13 to a 400 ppm cleanup level at Westgate.
14 Q. But doesn't Kevin Koporec, who is in
15 EPA, doesn't that indicate that they not only
16 object, but that they agree with 400 parts per
17 million being the appropriate clean-up level at
18 Westgate Trailer Park?
19 A. I don't believe that is Mr. Koporec's
20 opinion.
21 Q. Okay. Let's go back. Perhaps I
22 didn't -- the second page.
23 MR. GEDDIE: What exhibit?
24 THE WITNESS: 13, I believe.

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1 Second page of the memorandum?
 2 BY MR. MULLMAN:
 3 Q. Yes. Can you read the second
 4 paragraph from the top, the last line. Second
 5 paragraph, the first full paragraph.
 6 A. Which paragraph? Sorry.
 7 Q. Let me show you. It's probably
 8 easier that way.
 9 A. Which line did you want me to read?
 10 Q. Last one. "From --"
 11 A. "From the information presented there
 12 is no basis to alter the default ratio as 0.7;
 13 therefore, the soil lead concentration needed to
 14 protect human health is 400 ppm lead in soil."
 15 Q. So does that indicate that EPA not
 16 only doesn't object to DHEC's cleanup level, but
 17 agrees with it and supports it?
 18 A. In the absence of site-specific
 19 information, that may be a fair reading of this
 20 statement.
 21 Q. Okay. And how long would it take to
 22 get the site-specific information?
 23 A. We had proposed that we could get the
 24 information in two weeks.

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1 Q. Okay. When did you propose that?
 2 A. To DHEC on several occasions; to EPA
 3 in May 1999.
 4 Q. And this has been going on since at
 5 least July 1997, correct?
 6 A. That's correct.
 7 Q. Okay.
 8 A. And no one ever gave us authority
 9 to -- well, that's not true. DHEC never gave us
 10 authority to go ahead, or approval to go ahead
 11 and collect that data.
 12 Q. Okay.
 13 MR. MULLMAN: This is June 15,
 14 1999 letter to Mr. Lebo.
 15 (Whereupon, Exhibit 15 was marked
 16 for identification.)
 17 BY MR. MULLMAN:
 18 Q. This is to Mr. Lebo. Do you remember
 19 seeing this document, this letter?
 20 A. I'm going to take a moment to look at
 21 it, please.
 22 Q. Okay.
 23 A. Yes, I do recall seeing this letter.
 24 Q. It talks about a -- on October 23,

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1 1998, the Department contacting Mr. Lebo
 2 regarding the need for additional sampling of
 3 the King Acres subdivision, correct?
 4 A. That's what it says.
 5 Q. And has that sampling been done?
 6 A. It's either being done or it's been
 7 done. I believe it's been done.
 8 Q. Okay. It also states, in that same
 9 paragraph, the third line from the bottom in
 10 that paragraph, the state's industrial clean-up
 11 number of 895 parts per million was not
 12 appropriate, according to Exide.
 13 Do you agree with that? Has DHEC
 14 asked you to clean up the site to 895 parts per
 15 million?
 16 A. They have not asked us to clean up
 17 the site to 895 parts per million.
 18 Q. Have you submitted a proposal for
 19 collecting additional samples in the Kings Acre
 20 subdivision?
 21 A. Yes, we did.
 22 Q. Okay. And that is pursuant to the
 23 Consent Order of 96-12-HW?
 24 A. I'm not sure if it's pursuant to that

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1 Consent Order or just in cooperation with the
 2 DHEC request.
 3 Q. Okay. On the second page, the first
 4 line, the first complete sentence. "If you feel
 5 additional sampling and/or modeling is not
 6 required, then a remediation plan for Kings
 7 Acres, which delineates the areas of removal
 8 400 parts per million, should be submitted
 9 within 45 days of receipt of this letter,"
 10 correct?
 11 A. That's what it states.
 12 Q. Now, does DHEC want you to clean
 13 Kings Acres to 400 parts per million?
 14 MR. GEDDIE: I object to the form
 15 of the question.
 16 THE WITNESS: I don't know what
 17 DHEC wants.
 18 BY MR. MULLMAN:
 19 Q. Okay. Have they informed you of
 20 that?
 21 A. That they want us to clean up to 400
 22 ppm?
 23 Q. Yes.
 24 A. No.

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1 Q. And have you -- is this why you did
2 additional sampling, because you feel it's
3 necessary, pursuant to this letter?
4 A. We had told DHEC, prior to this
5 letter, that we thought that additional sampling
6 was necessary to be able to run the IEUBK model
7 for Kings Acres.
8 Q. Okay. And who was collecting the
9 wipe samples for this IEUBK model, is it AGC?
10 A. I don't recall specifically what data
11 is being collected, but all the data collection
12 is by AGC or subcontractors of theirs.
13 Q. Okay. And are you aware of who the
14 subcontractors are?
15 A. I don't know that there are any
16 subcontractors. Sometimes they do use
17 subcontractors for specific tasks.
18 Q. Okay.
19 (Whereupon, Exhibit 16 was marked
20 for identification.)
21 BY MR. MULLMAN:
22 Q. It mentions -- well, do you remember
23 writing this letter?
24 A. Yes.

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1 Q. It mentions sending a separate cover,
2 a notebook, containing the materials which
3 contain the communications between Exide and
4 DHEC. Do you remember sending that?
5 A. Yes.
6 Q. Is that going to be disclosed to
7 plaintiff's counsel in this case?
8 A. If there's an appropriate request,
9 I'm sure we'll provide it.
10 Q. Okay.
11 MR. GEDDIE: Have you asked for
12 it?
13 MR. MULLMAN: I think so. We
14 asked for all correspondence. I think this
15 would fall under it.
16 MR. GEDDIE: Well, then, you'll
17 get it.
18 MR. MULLMAN: Okay.
19 BY MR. MULLMAN:
20 Q. In the second paragraph, the fourth
21 line, it says, "Rather than respond, or even
22 challenge Exide to confirm its commitment, DHEC
23 simply decided to bring NEIC into the picture."
24 Why do you believe that DHEC was the

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1 one who brought NEIC into the picture?
2 A. EPA has stated as much to us.
3 Q. Okay. And that memo that we looked
4 at before --
5 A. It was towards the beginning --
6 Q. Was it?
7 A. -- of the exhibit.
8 MR. GEDDIE: The NEIC report is
9 No. 2, Draft Report.
10 MR. MULLMAN: Yeah. I don't want
11 the NEIC report. I want the EPA letter
12 talking about the objectives in getting the
13 NEIC --
14 BY MR. MULLMAN:
15 Q. It's Exhibit 9, then, I'm talking
16 about. Why don't you review that. Does that
17 letter and accompanying memo indicate that EPA
18 was the one who got NEIC involved?
19 A. This memo, by itself, is unclear. It
20 states, quote, Regional waste division staff in
21 working with South Carolina asked us if we knew
22 of a way to show responsibility of lead
23 deposition or could assist them in doing so.
24 Therefore, it's not clear from this

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1 memo whether the request originated with EPA or
2 with DHEC or with someone else instead of South
3 Carolina.
4 Q. Do you know if DHEC requested EPA to
5 ask NEIC to get involved so that they would have
6 justification for Exide to clean it up at 400
7 parts per million?
8 A. My understanding is that NEIC was not
9 doing anything to address the cleanup level,
10 but, rather, to determine whether they could
11 espeeiate (phonetic) lead by source.
12 I'm not sure that that answered all
13 of your question.
14 Q. It's good enough.
15 Okay. The next page. The
16 paragraph --
17 A. Still on Exhibit 9?
18 Q. No, I'm sorry. I'm back to --
19 MR. GEDDIE: 16?
20 BY MR. MULLMAN:
21 Q. 16, yeah.
22 A. You're on the second page of the
23 letter?
24 Q. Yes. The second to the last

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1 paragraph. "It is evident from the foregoing
2 that DHEC mislead EPA if it indicated that Exide
3 had refused to proceed with remediation at the
4 site."

5 Now, how did they mislead EPA, if
6 Exide is disagreeing with the cleanup level of
7 400 parts per million?

8 A. The disagreement over the cleanup
9 level postdates DHEC's referral of the matter to
10 EPA and request for NEIC to become involved,
11 based upon what EPA has indicated to us about
12 the timing of that referral and request.

13 Q. Okay. And who at EPA told you that?

14 A. Billy Bright at EPA, Region 4.

15 Q. Okay. The next sentence says,
16 "Therefore, there was no legitimate reason for
17 the NEIC investigation," correct?

18 A. That's what it says.

19 Q. Well, if they're trying to figure out
20 the source, isn't there a legitimate reason?

21 A. The question is, why are they
22 spending any money trying to figure out the
23 source?

24 Q. Because they want the responsible

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1 party to pay for the cleanup?

2 A. The allegedly responsible party at
3 that point has already indicated it wants to sit
4 down with DHEC and discuss future progress at
5 the site, including cleanup, prior to the date
6 of the DHEC referral to the EPA.

7 Q. So you're admitting that Exide is the
8 responsible party then?

9 A. No. I'm stating that Exide had
10 already stated to DHEC in writing that it was
11 willing to proceed with further action with the
12 site at its cost.

13 Q. Well, what if EPA and DHEC wanted to
14 know who the other sources are besides Exide?

15 A. If that's what they wanted to know,
16 then that would be an appropriate action, but
17 not one for which Exide ought to be responsible.

18 Q. Okay. So you just -- the complaint
19 is that you didn't want to pay for the NEIC
20 investigation?

21 A. The complaint is, that insofar as the
22 NEIC investigation was focused on proving
23 Exide's culpability or liability for lead levels
24 at Westgate Trailer Park, it was a waste of

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1 money and time.

2 Q. Okay. Well, I don't -- I mean, what
3 makes you think that the NEIC was gunning for
4 Exide or trying to prove that Exide was the
5 source? I think they're just trying to figure
6 out who the source is, not that Exide is the
7 source.

8 MR. GEDDIE: Is that the
9 question?

10 BY MR. MULLMAN:

11 Q. Yeah. I'm saying -- well, he kind of
12 phrased it that the NEIC is kind of trying to
13 determine if Exide is the source, and I'm
14 wondering why you think that?

15 A. As I said earlier, we are not aware
16 of any actual report of the NEIC investigation,
17 but it has been indicated to us that that was
18 the focus of the NEIC investigation.

19 Q. Okay. Who told you that?

20 A. Personnel at EPA.

21 Q. Personality PA?

22 A. Personnel at EPA.

23 Q. Oh. Well, which personnel?

24 A. In discussions with Mr. Bussey and

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1 Mr. Bright -- from discussions with Mr. Bussey
2 and Mr. Bright, I would infer that that was the
3 purpose of the NEIC investigation.

4 Q. Okay. Well, an inference is a little
5 different than them specifically telling you.

6 A. Mr. Bussey and Mr. Bright have
7 indicated that the reason the NEIC was asked to
8 do any work was because DHEC told EPA that Exide
9 had refused to proceed with cleanup at the site
10 as of February of 1997.

11 Q. Okay.

12 A. And that being the reported impetus
13 for the NEIC investigation, we conclude that we
14 are at least a principal, if not the target, of
15 the NEIC investigation.

16 Q. Okay. Who is Billy Bright -- well,
17 what is his job at the EPA?

18 A. I don't know his exact title. I
19 believe he's in the enforcement section or maybe
20 in the cost recovery section at Region 4.

21 Q. Okay. Well, what if the NEIC report
22 indicates that Exide is not a responsible party?
23 Wouldn't that be something that Exide wants to
24 know? I mean, then you wouldn't have to pay for

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1 the cleanup.
 2 A. Well, we've already done that, so it
 3 wouldn't do much good for us.
 4 Q. Would you want the NEIC to do a study
 5 of King Acres or anything to maybe get you off
 6 the hook for cleaning up King Acres?
 7 A. Again, it's our position that any
 8 work the NEIC has done and might do of a similar
 9 nature in this area would be unnecessary.
 10 Q. Because Exide is committing to
 11 cleaning up?
 12 A. Exide has agreed, has repeatedly
 13 agreed, offered, and continues to, to do
 14 cleanups to appropriate levels.
 15 Q. Okay. Why?
 16 A. As I indicated earlier, we believe
 17 that we have contributed to lead levels in these
 18 areas.
 19 Q. Okay.
 20 (Whereupon, Exhibit 17 was marked
 21 for identification.)
 22 BY MR. MULLMAN:
 23 Q. And, once again, I think a page
 24 that's kind of had to be faxed to us was

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1 missing. It was not connected. Is this
 2 Mr. Bussey's letter in response to your May 28,
 3 1999 letter?
 4 A. That's what it states in the first
 5 sentence, so I assume that's the case.
 6 Q. And do you remember receiving this
 7 letter?
 8 A. Yes.
 9 Q. And does this letter indicate why
 10 NEIC was involved?
 11 A. Yes. It states EPA's explanation as
 12 of that date for how -- at least how NEIC became
 13 involved, not why.
 14 Q. Okay. What's that explanation?
 15 MR. GEDDIE: Doesn't the letter
 16 speak for itself?
 17 MR. MULLMAN: I want Mr. Levine's
 18 interpretation of the letter.
 19 THE WITNESS: Why don't -- well,
 20 I can't -- I'm not sure what you mean by my
 21 interpretation of the letter.
 22 BY MR. MULLMAN:
 23 Q. Well, when you read it, what did you
 24 think it meant?

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1 MR. GEDDIE: Objection. I think
 2 the letter speaks for itself, but answer it
 3 if you can.
 4 THE WITNESS: I believed it to be
 5 consistent with -- and believe it to be
 6 consistent with my understanding of how the
 7 NEIC investigation started, as I stated in
 8 my last answer, that it was a referral from
 9 DHEC stating to EPA that Exide had refused
 10 to proceed with the cleanup.
 11 BY MR. MULLMAN:
 12 Q. Okay. Well, does EPA agree with DHEC
 13 assertions that EPA -- I mean that Exide was not
 14 agreeing to clean up Westgate Trailer Park?
 15 A. I don't know what EPA believes about
 16 that.
 17 Q. Okay. Well, in the second page, EPA
 18 is --
 19 A. The page marked No. 2 on the bottom?
 20 Q. Yes. EPA, Mr. Bussey, at least, from
 21 the EPA, states, "This reply --"
 22 A. I'm sorry. Where are you reading?
 23 Q. Middle to -- right in the middle of
 24 the page in the paragraph "In its letter --"

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1 A. Oh, I see where you're reading from.
 2 Q. It says, "This reply falls somewhat
 3 short of resounding assurance of Exide's
 4 willingness to proceed with site cleanup, and
 5 the claim made in the site investigation report,
 6 that Exide did not contribute to lead
 7 contamination in the trailer park was not
 8 retracted."
 9 So would you agree that EPA is kind
 10 of agreeing with DHEC there, saying Exide hasn't
 11 told us that they agreed to proceed with site
 12 cleanup, at least as of this letter, June 21,
 13 1999?
 14 A. I think the letter speaks for itself.
 15 Q. Okay. Well, did you ever -- or did
 16 Exide ever retract the assertion in the site
 17 investigation report that they did not
 18 contribute to lead contamination in the trailer
 19 park?
 20 MR. GEDDIE: Objection to the
 21 form of the question.
 22 If you understand it, you can
 23 answer it.
 24 BY MR. MULLMAN:

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1 Q. If you want me to rephrase it, that's
2 fine.
3 A. Please.
4 Q. Okay. Has Exide ever, in
5 correspondence or in conversations with EPA or
6 DHEC, have they ever retracted the statement
7 that's in the site investigation report stating
8 that they were not -- did not contribute to the
9 lead contamination in the trailer park?
10 MR. GEDDIE: I object to the form
11 of the question.
12 THE WITNESS: That's not what
13 this excerpt even says.
14 BY MR. MULLMAN:
15 Q. We're not talking about the excerpt.
16 We're talking about the question now. Did Exide
17 ever, in correspondence or conversation, tell
18 DHEC or EPA that they were a contributing factor
19 to the lead in Westgate Trailer Park?
20 A. Exide repeatedly offered to conduct a
21 cleanup for the Westgate -- for lead in soil at
22 the Westgate Trailer Park, notwithstanding the
23 perfectly valid technical point, which is made
24 in the excerpt in Exhibit 17, from which you

1 A. Since there's been no NEIC report, I
2 don't know.
3 Q. Well, there's been a draft, correct?
4 A. As far as I know, yes.
5 Q. And does that draft indicate who the
6 source is?
7 A. No.
8 Q. Okay. Lower down in the next
9 paragraph, the last line, I know we've discuss
10 this before, but it seems to be still an issue
11 in this letter. "DHEC required a soil removal
12 to a minimum of six inches instead of the
13 three-inch depth proposed in Exide's July 19
14 Remediation Plan."
15 And I'm wondering, at this point,
16 which was only a couple months before the
17 cleanup, was DHEC still asking Exide to clean
18 up to six inches?
19 A. Yes, it was.
20 Q. And when did they change their mind
21 on that?
22 A. Sometime prior to entry of the
23 Consent Agreement on August 5th -- or, I'm
24 sure it was prior to, but sometime in that

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1 read earlier.
2 Q. Okay. That doesn't really answer my
3 question though. Did Exide ever tell EPA or
4 DHEC that they were a contributing factor to the
5 lead in Westgate Trailer Park or King Acres
6 subdivision?
7 A. No.
8 Q. Okay. On Page 3, the third
9 paragraph, starting with, "Again --" the second
10 line or in the second sentence it says, "Exide
11 continues to complain that lead in soils at
12 Westgate did not originate from the Exide plant,
13 yet DHEC persists in its demands for a cleanup
14 plan from Exide."
15 Do you agree with that sentence?
16 A. No.
17 Q. Okay. Why not?
18 A. Exide's position has not been that it
19 was not a contributing source, but rather, that
20 the variability of the data does not, in and of
21 itself, conclusively resolve the question as to
22 whether Exide is the sole source.
23 Q. And would the NEIC report
24 conclusively answer that question?

1 July/August time frame.
2 Q. Okay. This letter is July 21st, so
3 sometime between -- I mean, I'm sorry. June
4 21st. So sometime between June 21st and August
5 5th, they changed --
6 A. I'm sorry. I didn't mean to
7 interrupt.
8 Q. They changed their mind between that
9 time period?
10 A. It may have been shortly after August
11 5th. I don't recall, frankly, whether it was
12 something covered in the Consent Agreement
13 the subsequent work plan.
14 Q. Was that part of Exide's willingness
15 to clean it up?
16 MR. GEDDIE: I object to the
17 form.
18 THE WITNESS: I'm not sure what
19 you mean by was it part of Exide's --
20 MR. MULLMAN: I'll rephrase.
21 BY MR. MULLMAN:
22 Q. Would Exide have cleaned it up to six
23 inches if DHEC demanded it?
24 A. I don't know the answer to that. As

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1 I said before, though, the resolution of that
2 question was one made by technical personnel at
3 DHEC and in discussing with AGC, not through or
4 by lawyers.
5 Q. Okay.
6 A. So I was not a party to that
7 discussion.
8 Q. Okay. That makes sense.
9 (Whereupon, Exhibit 18 was marked
10 for identification.)
11 BY MR. MULLMAN:
12 Q. This is a newspaper article in the
13 Greenville News, June 23, 1999. Do you remember
14 speaking to Bob Montgomery about this?
15 A. I've talked to Mr. Montgomery a
16 couple of times about the Westgate -- the
17 subject of Westgate.
18 Q. It mentions that -- if you see it,
19 your name right here.
20 A. Yes.
21 Q. That "Exide offered to do the cleanup
22 at a proposed level of 500 parts per million, a
23 standard EPA has used in a number of residential
24 areas in several states." Do you remember

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1 making that statement?
2 A. Yes.
3 Q. Okay. Do you know what other sites
4 or residential areas or what other states
5 they've used that in?
6 A. I know there are several. The one
7 that comes to mind right now is Granite City,
8 Illinois.
9 Q. And was that part of an Exide
10 cleanup?
11 A. Exide is participating in that
12 cleanup with a number of other potentially
13 responsible parties.
14 Q. Are there children with high lead
15 levels in those -- in that site?
16 A. I don't know. Assuming, by high lead
17 levels, you mean elevated above ten?
18 Q. Elevated.
19 Well, do you know the sites that
20 you're mentioning here, if there were kids with
21 elevated lead levels in all those sites, or in
22 any of those sites?
23 A. Right now, I don't recall what the
24 blood lead levels were at those sites.

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1 Q. Okay.
2 (Whereupon, Exhibit 19 was marked
3 for identification.)
4 BY MR. MULLMAN:
5 Q. I'm showing you a newspaper article
6 dated June 25, 1999 from the Spartanburg Herald
7 Journal. On Page 2, they have some quotes,
8 which I believe are from you, Mr. Levine. Do
9 you remember talking to Susan Orr?
10 A. I've talked to Ms. Orr on a couple of
11 occasions. I don't recall specifically when
12 this conversation was.
13 Q. Okay. And, once again, it seems that
14 you were quoted as saying that the higher number
15 still would protect public health and 500 parts
16 per million has been the acceptable standard in
17 other cleanups Exide has done. Besides the two
18 you've mentioned, are there any other sites --
19 A. There are other -- I'm sorry --
20 Q. -- that you can think of?
21 A. There are other sites, but none that
22 I can recall sitting here right now.
23 Q. Okay. So is it fair to say that
24 you're using other sites that Exide cleaned up

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1 as relevant to what their standard should be in
2 this case?
3 A. Absent a site-specific analysis, yes.
4 Q. Okay. And it says here, "We would
5 just like to know that there is a scientific
6 basis for a more strict cleanup, Levine said,"
7 correct? Is that what you told them?
8 A. Yes.
9 Q. And you don't believe that Kevin
10 Koporec, a toxicologist for EPA, his memo, gives
11 you a scientific basis for that?
12 A. Mr. Koporec's memo does not provide
13 such a basis.
14 Q. Okay. And you said that the stricter
15 cleanup would cost about twice as much because
16 it would involve removing more soil. How is
17 that? Can you explain that? If you're going to
18 take three inches off, does it matter if four or
19 500?
20 A. At the time that this article was
21 written, and, therefore, at the time I spoke to
22 Ms. Orr, the discussion between ourselves and
23 DHEC was over whether the cleanup level was
24 400 or 500, and not a wholesale removal of soil.

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1 And therefore, a lower cleanup level necessarily
 2 requires removal of more soil.
 3 Q. Okay. Well, was there a wholesale
 4 removal of soil at Westgate?
 5 A. Yes, there was.
 6 Q. Okay.
 7 A. About three months after this article
 8 was written.
 9 Q. Okay. So you've removed all three
 10 inches from the whole Westgate Trailer Park, is
 11 that --
 12 A. I don't recall if there was an area
 13 that was not included or not, but certainly all
 14 the areas where the trailers are placed, where
 15 people reside.
 16 Q. Okay. What about underneath the
 17 trailers?
 18 A. There was an analysis made -- no, we
 19 did not do a wholesale removal of soil below the
 20 trailers.
 21 Q. Okay. You just cemented those areas?
 22 A. Certain areas, yes.
 23 Q. And did you rely on an expert or a
 24 consultant to make the decision to cement those

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1 areas up instead of remove the soil?
 2 A. I did rely on a consultant in making
 3 that decision, yes.
 4 Q. Okay. Did you make that decision or
 5 was it somebody else?
 6 A. I made that decision.
 7 Q. Okay. Who did you rely upon?
 8 A. Advanced Geo Services.
 9 Q. And what scientific basis did they
 10 give you for that?
 11 A. The best summary of the scientific
 12 analysis is the letters that they sent to Scott
 13 Wilson explaining their analysis.
 14 There was one letter that summarized
 15 it, and there was another letter when Scott
 16 asked them to evaluate that remedy in light of
 17 certain criteria DHEC identified, and there was
 18 a subsequent letter in which AGC analyzed that
 19 method in light of the criteria specified.
 20 MR. MULLMAN: Okay. That's it
 21 for me.
 22 MR. GEDDIE: All right. No
 23 questions from me.
 24 ---

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(Whereupon, the deposition
 concluded at 3:15 p.m.)

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 INSTRUCTIONS TO WITNESS

1
 2
 3
 4 Please read your deposition over carefully
 5 and make any necessary corrections. You should
 6 state the reason in the appropriate space on the
 7 errata sheet for any correction that is made.
 8 After doing so, please sign the errata
 9 sheet and date it.
 10 You are signing same subject to the
 11 changes you have noted on the errata sheet,
 12 which will be attached to your deposition.
 13 It is imperative that you return the
 14 original errata sheet to the deposing attorney
 15 within thirty (30) days of receipt of the
 16 deposition transcript by you. If you fail to do
 17 so, the deposition transcript may be deemed to
 18 be accurate and may be used in court.
 19 ---
 20
 21
 22
 23
 24

<div style="text-align: right; margin-bottom: 10px;">142</div> <div style="margin-bottom: 10px;"> <p>1 ---</p> <p>2 ACKNOWLEDGEMENT OF DEPONENT</p> <p>3 I, ARI D. LEVINE, ESQUIRE, do hereby</p> <p>4 certify that I have read the foregoing pages,</p> <p>5 1 - 140, and that the same is a correct</p> <p>6 transcription of the answers given by me to the</p> <p>7 questions therein propounded, except for the</p> <p>8 corrections or changes in form or substance, if</p> <p>9 any noted in the attached Errata Sheet.</p> <p>10 -----</p> <p>11 DATE</p> <p>12 </p> <p>13 Subscribed and sworn to before me this -----</p> <p>14 day of _____, 1999.</p> <p>15 My commission expires: -----</p> <p>16 </p> <p>17 -----</p> <p>18 Notary Public</p> <p>19 </p> <p>20 </p> <p>21 </p> <p>22 </p> <p>23 </p> <p>24 </p> </div>	<div style="text-align: right; margin-bottom: 10px;">144</div> <div style="margin-bottom: 10px;"> <p>1 CERTIFICATION</p> <p>2 -----</p> <p>3 I hereby certify that the witness was duly</p> <p>4 sworn by me and that the deposition is a true</p> <p>5 record of the testimony given by the witness.</p> <p>6 </p> <p>7 </p> <p>8 </p> <p>9 </p> <p>10 </p> <p>11 <u>Sheila G. Malen, RPR</u></p> <p>12 Date: November 5, 1999</p> <p>13 (The foregoing certification of this transcript</p> <p>14 does not apply to any reproduction of the same</p> <p>15 by any means, unless under the direct control</p> <p>16 and/or supervision of the certifying shorthand</p> <p>17 reporter.)</p> <p>18 </p> <p>19 </p> <p>20 </p> <p>21 </p> <p>22 </p> <p>23 </p> <p>24 </p> </div>
<div style="text-align: right; margin-bottom: 10px;">143</div> <div style="margin-bottom: 10px;"> <p>1 -----</p> <p>2 ERRATA</p> <p>3 -----</p> <p>4 PAGE LINE CHANGE</p> <p>5 ----- ----- -----</p> <p>6 ----- ----- -----</p> <p>7 ----- ----- -----</p> <p>8 ----- ----- -----</p> <p>9 ----- ----- -----</p> <p>10 ----- ----- -----</p> <p>11 ----- ----- -----</p> <p>12 ----- ----- -----</p> <p>13 ----- ----- -----</p> <p>14 ----- ----- -----</p> <p>15 ----- ----- -----</p> <p>16 ----- ----- -----</p> <p>17 ----- ----- -----</p> <p>18 ----- ----- -----</p> <p>19 ----- ----- -----</p> <p>20 ----- ----- -----</p> <p>21 ----- ----- -----</p> <p>22 ----- ----- -----</p> <p>23 ----- ----- -----</p> <p>24 ----- ----- -----</p> </div>	

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70:5 79:13	words 31:10	94:10,13,21	52:21 71:6	3/12/99 3:23	6/15/99 4:3
83:10 84:1	39:10	94:24 142:5	75:8,11 81:12	3/19/97 3:17	6/21/99 4:5
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90:24 91:5,19	35:12 36:7	10 3:18 14:17	1995 18:24	30 141:15	6/25/99 4:7
92:1 93:20	39:18 40:21	93:23	39:12,13	30(b)(6) 9:20	6:99-1933-20
96:5,18 97:20	42:3,5 43:8,10	10/18/99 3:9	45:14 85:4	300 2:9	1:7
98:14,15 99:7	95:19 102:19	100 106:8	88:4 98:7	31 88:4	6040 86:1
99:23 100:5	103:1 125:8	101 3:20	1996 8:5,22	3600 1:14 2:13	63 25:2
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105:10 108:9	working 6:24	105 65:2	97:9	22:1,3 53:13	70 64:2
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113:13,18	120:21	11 3:19 96:22	8:24 19:3,10	64:5 78:2,2	700 63:7
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134:16,17	12:5 99:21	111 3:23	113:9 115:5	4/14/98 3:19	8
138:4,10	102:15 105:9	115 4:3	125:10 132:13	400 12:20,23	8 3:16 86:9,10
we'll 36:1 54:7	125:23,24	118 4:4	1998 3:10 16:11	13:2 19:11	8/13/97 3:18
61:17 72:23	126:3	12 3:20 28:24	35:16,20,21	20:11 25:10	80 24:23
85:5 107:16	Wright 89:23	101:10	80:4 96:21	25:14,18	80s 52:24 57:13
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wondering	0.7 114:12	1989 98:24 99:6	3 3:11 16:10	6	

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IV

Page 1 of 1

EPA ID: SC0000487678 Site Name: WESTGATE MOBILE HOME

State ID:

Alias Site Names:

City: GREER

County or Parish: GREENVILLE

State: SC

Refer to Report Dated: 12/30/1996

Report Type: SITE INSPECTION 001

Report Developed by: STATE

PA/SI

DECISION:

- ☒ 1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:
- ☒ 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)
- ☐ 1b. Site may qualify for action, but is deferred to:
- ☐ 2. Further Assessment Needed Under CERCLA:
- 2a. Priority: ☐ Higher ☐ Lower
- 2b. Other: (recommended action) NFRAP (No Further Remedial Action Planned)

DISCUSSION/RATIONALE:

SITE DECISION REVISED 9-11-2000.

Site status has been revisited by the SC Self-Directed Work Team. During summer 1999, past site owner/operator conducted an extensive soil removal under State oversight. Threat is effectively removed by this action. NFRAP.

Site Decision Made by:

Signature:

Ralph O. Howard, Jr. (9-11-00)

Date: 05/15/1997

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IV

Site Name: Westgate Mobile Home EPA ID#: SC0 000 487 687

Alias Site Names: _____

City: Greer

County or Parish: Greenville

State: SC

Refer to Report Dated: December 30, 1996

Report type: PA/SI

Report developed by: SCDHEC

DECISION:

☐ ☐ 1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:

<input type="checkbox"/> <input type="checkbox"/> 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)	<input type="checkbox"/> <input type="checkbox"/> 1b. Site may qualify for further action, but is deferred to:	<input type="checkbox"/> <input type="checkbox"/> RCRA <input type="checkbox"/> <input type="checkbox"/> NRC
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------

☒ ☒ 2. Further Assessment Needed Under CERCLA: 2a. (optional) Priority: ☐ ☐ Higher ☒ ☒ Lower

2b. Activity	<input type="checkbox"/> <input type="checkbox"/> PA	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> ESI
Type:	<input type="checkbox"/> <input type="checkbox"/> SI	<input type="checkbox"/> <input type="checkbox"/> HRS evaluation

☐ ☐ Other: _____

DISCUSSION/RATIONALE:

The trailer park is adjacent to facility which manufactured lead-bearing batteries between the late 60s and the present. The main concern is the high levels of lead present in surface soils in the trailer park. Since the battery plant owners have agreed to investigate the park and adjacent plant under State oversight, and remediate the affected areas if necessary, the site will be considered "Low Priority" for an ESI, but will be reevaluated after State actions have progressed further.

Report Reviewed

and Approved by: Ralph O. Howard, Jr Signature: Ralph O. Howard, Jr. Date: 5-15-97

Site Decision

Made by: S. Carolina Preremedial Team Signature: Ralph O. Howard, Jr. Date: 5-15-97

~~Attorney Work Product/Enforcement Confidential~~
~~FIOA Exempt/Draft Document~~

*not waste doc
duplicate in
[unclear] file (Ralph)*

May 15, 1998

MEMORANDUM

SUBJECT: Initial Soil Lead Results for the Westgate Trailer Park, Greer, South
Carolina, Draft Report

Westgate Trailer Park
Greer, SC
Project No. R55, VP0300

FROM: Diana A. Love, Esq.
Director, NEIC

TO: Bruce Miller
Associate Director for Technical Support
EPA - Region 4, Atlanta, Georgia

Attached is a report for the subject case. If there are any questions, please
contact Steve Machemer at (303) 236-5132, extension 287.

Attachment

cc: Floyd Ledbetter
Sherri Fields

Attorney Work Product/Enforcement Confidential
FIOA Exempt/Draft Document

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement and Compliance Assurance
Office of Criminal Enforcement, Forensics and Training

ANALYTICAL RESULTS

Initial Soil Lead Results for the Westgate Trailer Park
Draft Report
Greer, South Carolina
Project No. R55,VP0300

MAY 15, 1998

Steve Machemer
Project Leader

NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
Diana A. Love, Director
Denver, Colorado

Attorney Work Product/Enforcement Confidential
FIOA Exempt/Draft Document

Initial Soil Lead Results for the Westgate Trailer Park
Draft Report
Greer, South Carolina
Project No. R55,VP0300

Introduction

At the request of EPA Region 4, NEIC conducted sampling and subsequent analysis of soil samples from the Westgate Trailer Park in Greer, South Carolina. The objective was to identify the source of lead contamination found in the trailer park soil. As an initial step, soil litter samples from the trailer park were analyzed for total lead concentration. This report provides the initial results of the lead analyses of the soil litter samples from the trailer park.

Sampling

Eighty samples (1A to 20D) of soil litter were subsampled from eighty soil cores taken from various locations in the Westgate Trailer Park on May 12, 1997. Soil cores were collected in polycarbonate core tubes 15 centimeters (6 inches) in length and 5 centimeters (2 inches) in diameter by slide hammer coring devices. Locations of twenty "A" samples (1A to 20A) were chosen based on XRF analyses conducted in the field by EPA-Region 4 personnel. To determine the areal extent and variability of lead concentrations in the soil, "B", "C", and "D" sample locations were chosen randomly relative to "A" samples as described below. This resulted in the collection of twenty sets of 4 samples, "A" through "D" which represented separate areas of soil in the trailer park.

Locations of twenty "B", twenty "C", and twenty "D" samples (1B to 20B, 1C to 20C, and 1D to 20D) were determined relative to "A" samples using a preconstructed template. The template was constructed using computer generated pairs of random numbers. The pairs of random numbers represented randomly selected sample locations for samples "B", "C", and "D" within separate one third areas of the circle with sample "A" at the center and a radius of 1.5 meters (5 feet) (Figure 1a). The configuration of "A", "B", "C", and "D" sample locations are shown in Figure 1a. Obstructions required the distance from sample "A" to each of samples "B", "C", and "D" to be cut in half for sample sets 1, 5, 14 and 15. In this way, 16 sample sets of 4 samples (A to D) represented the lead concentrations in the soil litter over separate areas of 7.3 square meters. For sample sets 1, 5, 14 and 15, the area was 1.8 square meters.

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Sample Preparation

The litter layer material was separated from the mineral soil in the cores and dried to constant weight at 50 degrees Celsius. Litter layer samples were ground using a Spex Shatterbox ring and puck grinding mill. Aliquots of ground samples were prepared for analysis by nitric acid digestions and potassium hydroxide fusions.

Sample Analysis

Lead in the soil litter layer was analyzed by inductively coupled plasma-mass spectrometry (ICP-MS) on nitric acid digestions as the primary analytical technique. For confirmation, lead was also analyzed by inductively coupled plasma-atomic emission spectroscopy (ICP-AES) on potassium hydroxide fusions.

Sample Statistics

Averages, standard deviations, and relative standard deviations were calculated for the entire set of eighty lead analyses and for each set of 4 samples (A to D) representing distinct areas in the trailer park. In addition, two-sided (upper and lower) confidence limits for the mean at 95 percent confidence and three degrees of freedom were calculated for each area represented by sets of 4 samples.

Results

The ICP-MS results of lead concentrations for the soil litter in the trailer park are reported (Table 1a.). ICP-MS and ICP-AES analyses were in good agreement where 69 percent of results were within 10 relative percent difference and 99 percent of results were within 20 relative percent difference. The attached maps (Figure 1b and 1c) display the soil sample locations and lead concentrations for the soil litter layer in Westgate Trailer Park. For all eighty samples collected, lead concentrations average 812 mg/kg and range from 287 to 2760 mg/kg with a relative standard deviation of 63 percent. Large variations in lead concentrations are also found between areas represented by sample sets. For example, lead concentrations in sample set 17A-17D averages 356 mg/kg while lead concentrations in sample set 9A-9D averages 1925 mg/kg, or 5 times as much. These results show a large variability in lead concentrations within the trailer park.

In addition, large variations of lead concentrations occur within areas represented by sample sets. For example, sample set 10A-10D shows variations from 549 to 1310 mg/kg with a relative standard deviation of 49 percent, and sample set 19A-19D shows variations from 287 to 504 mg/kg with a relative standard deviation of

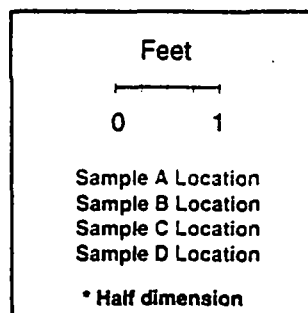
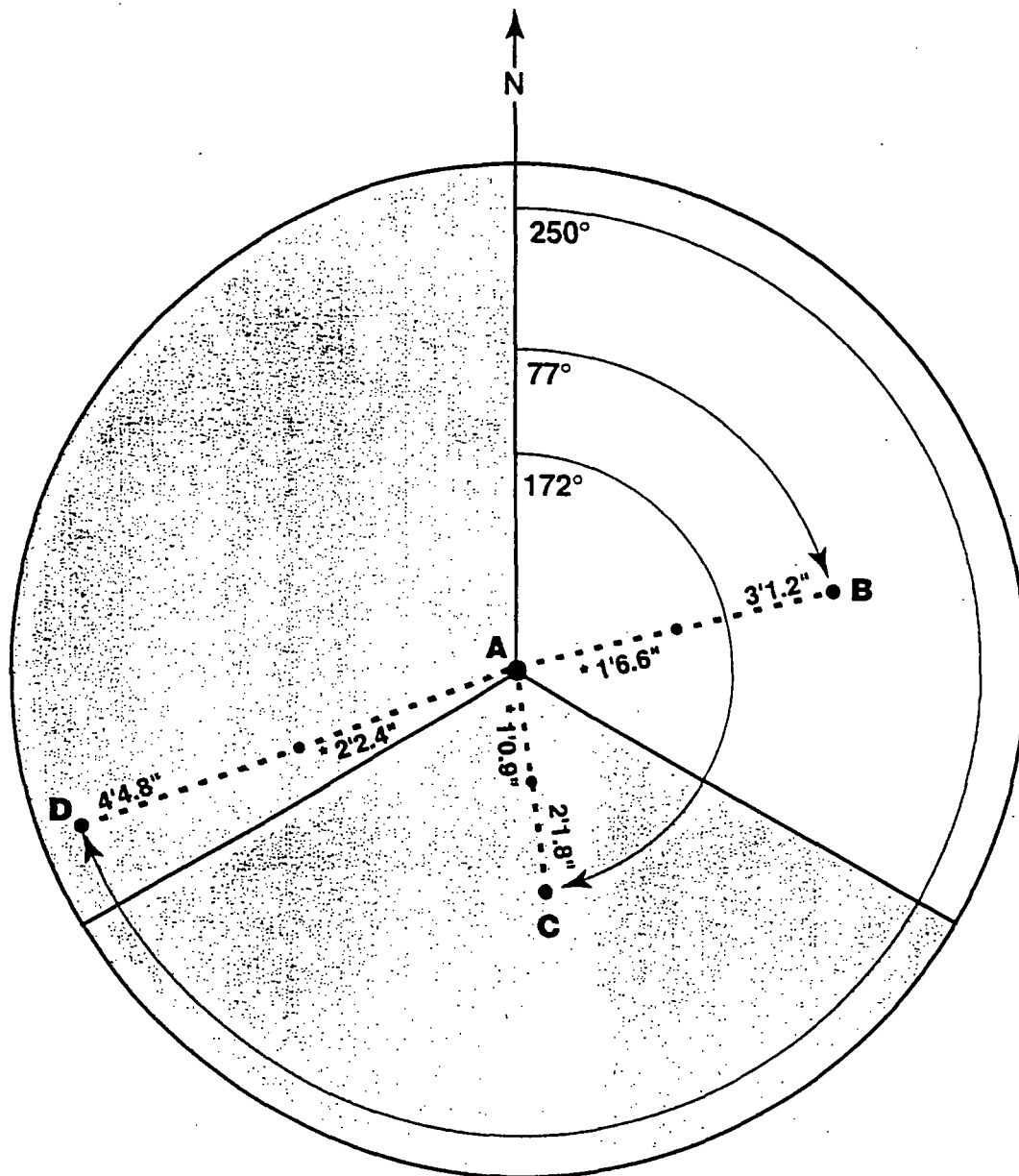
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22 percent. These results indicate a large variability in lead concentrations within areas represented by sample sets.

Upper confidence limits of the mean for areas represented by sets of 4 samples do not reveal any area in the trailer park where the average lead concentration is below 400 mg/kg at 95 percent confidence. In other words, variations in lead concentrations are too great over short distances (less than a meter) to distinguish areas of soil with lead concentrations below 400 mg/kg with any reasonable confidence. Therefore, based on a threshold level of 400 mg/kg, the entire area of the trailer park must be remediated with the possible exception of the northeast area which has previously undergone remediation activity.

Table 1a. Lead Concentrations in the Westgate Trailer Park soil. Mass spectrometry results.

Sample	Lead (mg/kg)	Sample Set Std Dev	Sample Set Average	Relative Std Dev	LCL of the Mean	UCL of the Mean
001-asa1	983					
001-asb1	1240					
001-asc1	1210					
001-ads1	973	143	1102	0.13	874	1320
002-asa1	801					
002-asb1	561					
002-asc1	869					
002-ads1	836	140	767	0.18	544	989
003-asa1	559					
003-asb1	1100					
003-asc1	978					
003-ads1	834	232	887	0.27	497	1237
004-asa1	1430					
004-asb1	642					
004-asc1	1170					
004-ads1	836	350	1020	0.34	463	1576
005-asa1	1470					
005-asb1	1810					
005-asc1	1340					
005-ads1	2550	550	1743	0.32	868	2817
006-asa1	887					
006-asb1	1050					
006-asc1	645					
006-ads1	819	168	850	0.20	583	1117
007-asa1	620					
007-asb1	825					
007-asc1	886					
007-ads1	718	48	662	0.07	586	738
008-asa1	1210					
008-asb1	2050					
008-asc1	2050					
008-ads1	1390	439	1675	0.26	976	2374
009-asa1	2760					
009-asb1	1610					
009-asc1	1670					
009-ads1	1660	557	1925	0.31	1038	2812
010-asa1	572					
010-asb1	602					
010-asc1	1310					
010-ads1	549	368	758	0.49	172	1344
011-asa1	321					
011-asb1	878					
011-asc1	813					
011-ads1	367	256	544	0.47	138	951
012-asa1	679					
012-asb1	641					
012-asc1	528					
012-ads1	817	120	666	0.18	475	857
013-asa1	836					
013-asb1	474					
013-asc1	693					
013-ads1	669	149	688	0.22	431	905
014-asa1	418					
014-asb1	371					
014-asc1	445					
014-ads1	318	37	388	0.15	297	479
015-asa1	440					
015-asb1	400					
015-asc1	541					
015-ads1	527	68	477	0.14	369	585
016-asa1	466					
016-asb1	512					
016-asc1	301					
016-ads1	460	92	435	0.21	298	581
017-asa1	336					
017-asb1	445					
017-asc1	323					
017-ads1	319	60	356	0.17	260	451
018-asa1	442					
018-asb1	370					
018-asc1	471					
018-ads1	411	43	424	0.10	355	492
019-asa1	504					
019-asb1	287					
019-asc1	423					
019-ads1	418	90	408	0.22	265	551
020-asa1	502					
020-asb1	485					
020-asc1	488					
020-ads1	522	17	499	0.03	472	528
average	812	197	812	0.22	498	1128
minimum	287	17	368	0.03	138	451
maximum	2760	557	1925	0.49	1038	2812
std dev	511	169	469	0.12	281	718
rel	0.63	0.88	0.58	0.53	0.52	0.64
median	633	142	667	0.20	488	928



DRAFT

Figure 1a
 TEMPLATE DIMENSIONS FOR THE
 WESTGATE TRAILER PARK SAMPLING
 May 12, 1997





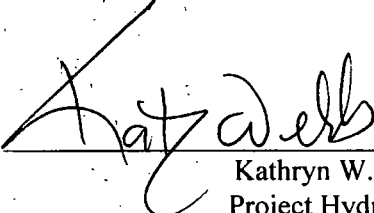
**REMEDIAL INVESTIGATION REPORT
WESTGATE TRAILER PARK
GREER, SOUTH CAROLINA**

Prepared for
EXIDE CORPORATION

Greer, South Carolina

Prepared by
THE FLETCHER GROUP, INC.

January 1997



Kathryn W. Webb, PG
Project Hydrogeologist

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Appendix C	Laboratory Report and Chain of Custody Form
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1.0 Executive Summary

The Remedial Investigation (RI) for the Westgate Trailer Park, Old Chick Springs Road, Greer, South Carolina was conducted by Exide Corporation pursuant to the South Carolina Department of Health and Environmental Control (SC DHEC) Consent Order 96-12-HW (the "CO") (Appendix A).

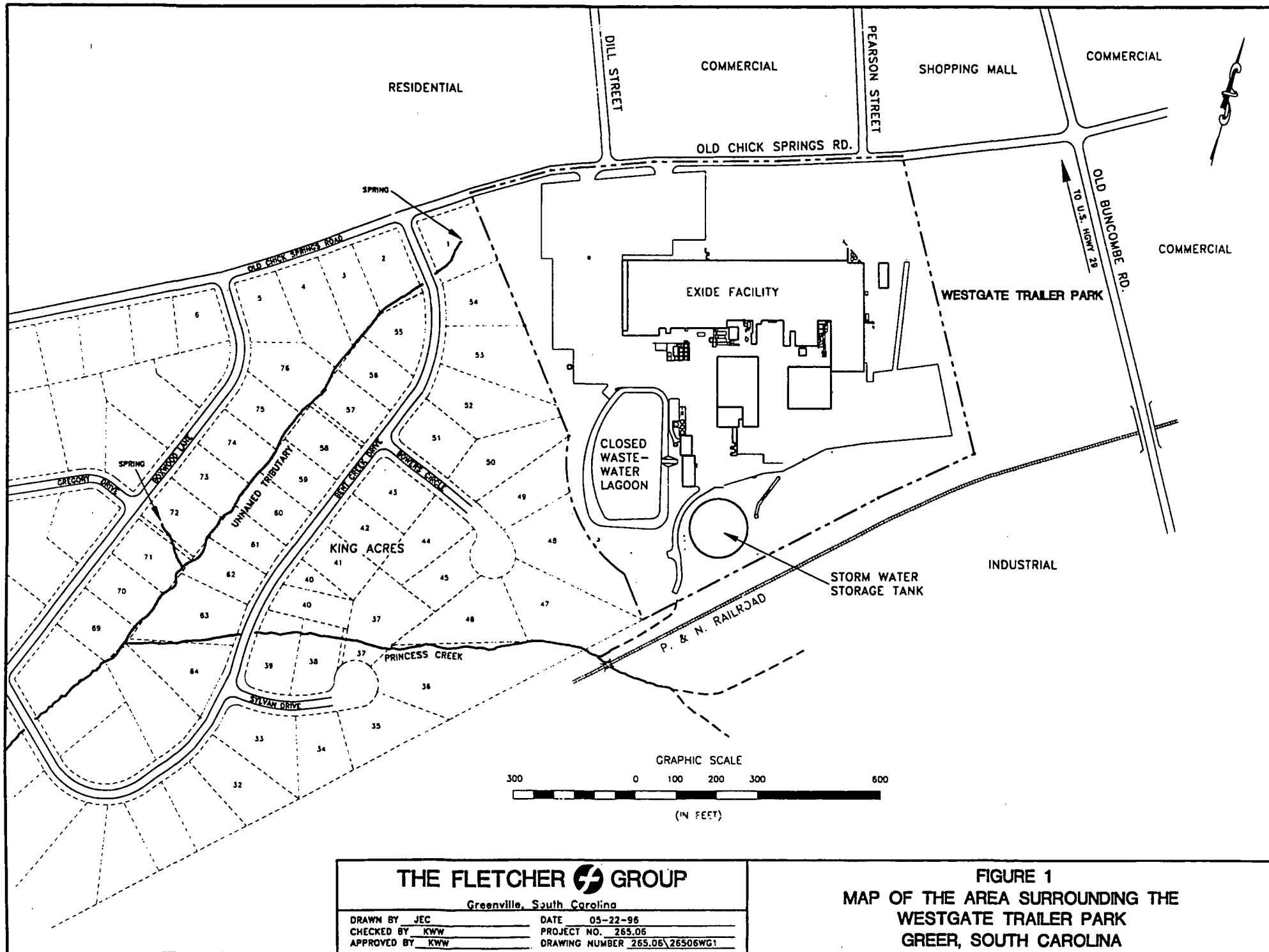
The Westgate Trailer Park is located at the intersection of Old Buncombe Road and Old Chick Springs Road in Greer, South Carolina (Figure 1). The trailer park was developed in the 1960's and consists of approximately 52 mobile homes located on a 5 acre tract. The Exide Corporation facility located immediately southwest of the trailer park has been used for the manufacture of lead acid batteries since the early 1960's.

In 1992, SC DHEC conducted investigations in the trailer park and determined that the soil did not present an environmental problem. In June 1994, under contract with the United States Environmental Protection Agency (US EPA), Roy F. Weston Inc. collected fifty (50) shallow soil samples (0-3 inches) for total lead analysis in the trailer park and six (6) of the samples contained total lead concentrations greater than 500 ppm. The US EPA removed the shallow soil from these six (6) areas in September 1994 (verbal communication with Warren Dixon, EPA).

The RI for the Westgate Trailer Park was designed to assess the current lead concentration in the surface soil throughout the trailer park as well as to recheck the concentration around the former removal action area. An assessment of potential source pathways for the lead concentrations was also conducted.

The RI involved the sampling and analysis of forty two (42) surface soil grab samples (0 to 3 inches in depth) located along the inner three (3) rows of trailers and two (2) grab samples (one surface, 0 to 3 inches, and one subsurface, 9 to 12 inches) from within a former removal action area. All the samples were analyzed for total lead. Fourteen (14) of the RI surface soil samples contained total lead concentrations greater than 500 ppm. The total lead concentrations for the samples collected from the former removal action area were less than 26 ppm.

Available air monitoring data does not indicate that emissions from the Exide facility contributed to soil impacts in the trailer park. No surface water runoff from the Exide facility flows in the direction of the trailer park, therefore, surface water runoff is not a possible contributor.



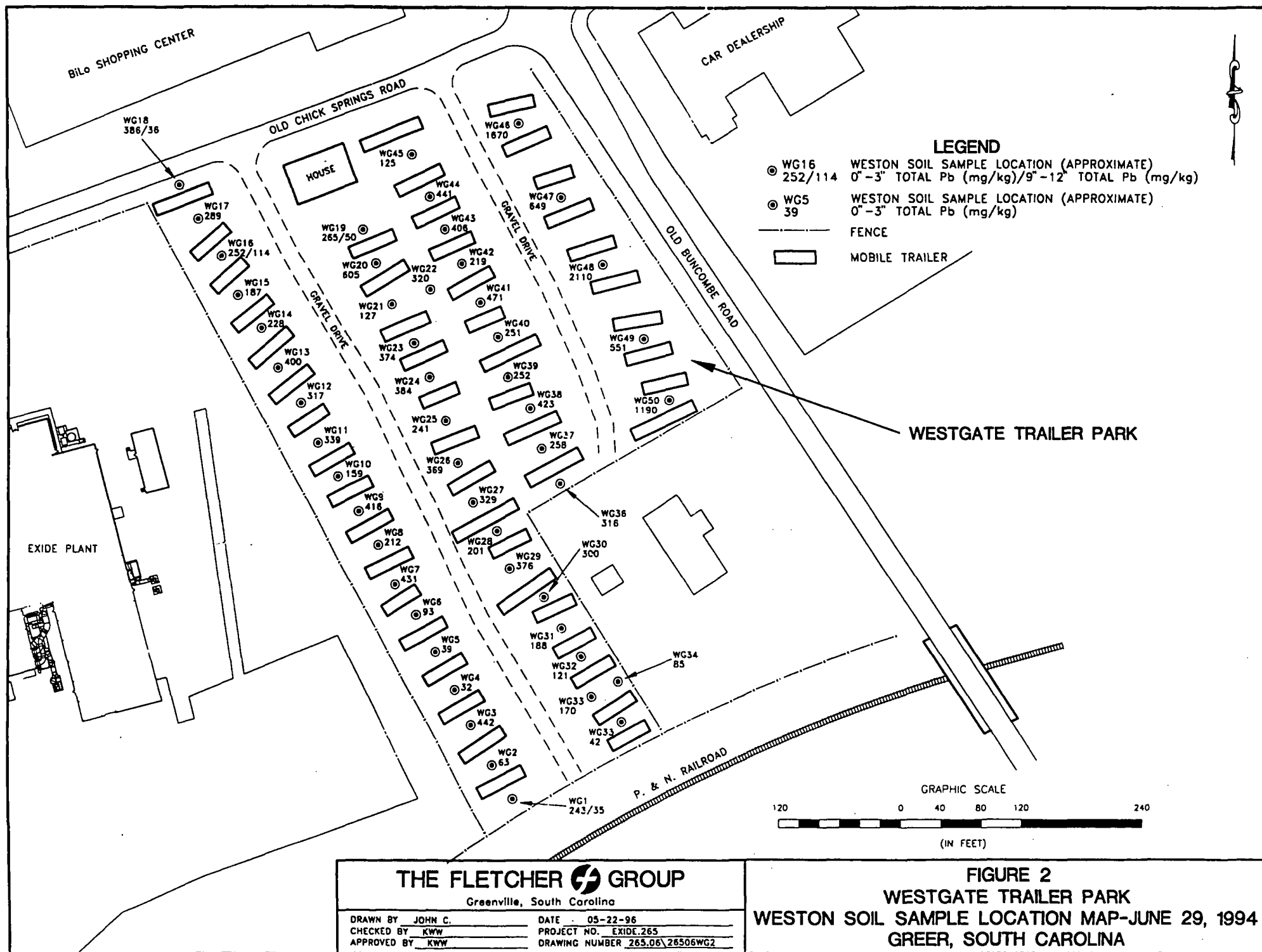
2.0 Previous Investigations and Removal Actions

In 1992, SC DHEC conducted two (2) investigations in Westgate Trailer Park and found surface soil total lead concentrations ranging from 270 ppm to 800 ppm. Several of the samples were also analyzed for TCLP. The TCLP lead results were all less than 1 mg/l and, therefore, SC DHEC determined that the soil did not present an environmental problem (SC DHEC memo from Harold Seabrook to M. Anderson, dated May 28, 1992).

In June 1994, the US EPA, using Roy F. Weston as a contractor, and the SC DHEC conducted a follow-up soil sampling event. Fifty (50) surface soil samples and four (4) subsurface samples were collected and analyzed for total lead. Six (6) of the shallow soil samples exceeded a total lead concentration of 500 ppm. All six (6) samples with elevated lead concentrations were from locations along the row of trailers adjacent to Old Buncombe Road. All the subsurface soil samples had total lead concentrations of 114 ppm or less. In September 1994, the US EPA conducted a removal action in the six (6) areas with lead concentrations greater than 500 ppm. According to the soil removal work plan, a grid of approximately 10 to 15 feet around each of the six (6) sample locations was excavated. Clean soil was to have been backfilled into the excavations. The US EPA has not prepared a follow-up report documenting the activities conducted during the removal action. The approximate locations of the Weston soil samples are shown in Figure 2. The total lead concentrations reported are posted by each sample location.

SC DHEC also conducted a short term air monitoring program in the Westgate Trailer Park from December 1994 through May 1995. An air monitoring station was set up in the trailer park and was monitored by SC DHEC as a comparison to an air monitoring station located on Exide's property, near the trailer park. The results indicated a good correlation between the data recorded at the Exide air monitoring station and the station in the trailer park. The lead in-air monitored by the Exide station was well below the National Ambient Air Quality Standard (NAAQS) for lead, and the air-borne lead detected in the trailer park was consistently less than that recorded at the Exide station.

Correspondence and data from these previous investigations were included in the RI Work Plan.



3.0 Remedial Investigation Activities

The Remedial Investigation soil sampling was conducted on November 6, 1996 following written approval from SC DHEC of the revised work plan and authorization from the trailer park property owner. The soil sampling was performed in accordance with the procedures described in the work plan. New, disposable sampling equipment was used to avoid the possibility of cross-contamination between locations. All the sampling activities were documented in a bound field notebook and the actual sample locations were measured from permanent structures for location on the scaled map included as Figure 3. SC DHEC personnel were present during most of the sampling.

The soil sampling involved collecting forty three (43) surface soil grab samples and one (1) subsurface soil grab sample for total lead analysis. Forty two (42) of the surface soil samples were located in a grid across the western three rows in the trailer park. One surface soil and one subsurface soil sample was collected from an area where the US EPA had performed the 1994 removal action. The grid sample locations were laid out at 71 foot intervals beginning approximately 2 feet off the fence along the western side of the trailer park. Sample locations were adjusted where necessary to avoid structures.

All the surface soil grab samples were collected from a depth of 0 to 3 inches below the ground surface. The subsurface soil grab sample within the former removal action area was collected from in-place soils at a depth of 9 to 12 inches. Based upon visual appearance of the soil types and compaction, the backfill material appeared to extend to a depth of approximately 9 inches. All the soil samples were submitted for total lead analysis.

As a quality control measure, one (1) duplicate and three (3) blind duplicate soil samples were submitted to the laboratory. The blind duplicate sample numbers are proceeded by the number one (1), for example, the blind duplicate for sample WG-03 was WG-103. No equipment rinsate blanks were collected since no field decontamination was conducted.

Table 1 is a summary of the November 1996 RI total lead in soil data. The RI sample locations and analytical results are shown on Figure 2, with the total lead concentrations posted. Fourteen (14) of the surface soil samples had a total lead concentration greater than 500 ppm. These fourteen (14) locations are generally located along the northwest side of the trailer park and most are covered with a grass mat, vines, weeds or organic detritus. Pictures of representative sample locations are included in Appendix B. The laboratory report and chain of custody form is included in Appendix C. A summary of the duplicate

soil data is provided in Appendix D. The relative percent difference between the samples and the duplicate samples ranged from 4 to 41%. Three (3) of the duplicate sets had a relative percent difference of 7% or less. Only one sample, WG-32, had a relative percent difference of 41%. The difference in the WG-32 duplicate concentrations is likely due to the inhomogeneity of the soil sample.



FIGURE 3
NOV. 1996 SOIL SAMPLE LOCATION MAP
WESTGATE TRAILER PARK
GREER, SOUTH CAROLINA

SUMMARY OF NOV. 1996 SOIL LEAD CONCENTRATIONS
WEST GATE TRAILER PARK

Date: 01/08/97

(DEPTHS 0-3" AND 9-12")

SITE	DATE	DEPTH (m)	RESULT TYPE	Lead (mg/kg)
WG-01	11/06/96	0.000	Set 1	494
WG-02	11/06/96	0.000	Set 1	373
WG-03	11/06/96	0.000	Set 1	434
WG-04	11/06/96	0.000	Set 1	280
WG-05	11/06/96	0.000	Set 1	513
WG-06	11/06/96	0.000	Set 1	638
WG-07	11/06/96	0.000	Set 1	1420
WG-08	11/06/96	0.000	Set 1	510
WG-09	11/06/96	0.000	Set 1	1030
WG-10	11/06/96	0.000	Set 1	572
WG-11	11/06/96	0.000	Set 1	837
WG-12	11/06/96	0.000	Set 1	764
WG-13	11/06/96	0.000	Set 1	441
WG-14	11/06/96	0.000	Set 1	1610
WG-15	11/06/96	0.000	Set 1	1460
WG-16	11/06/96	0.000	Set 1	86.7
WG-17	11/06/96	0.000	Set 1	45.8
WG-18	11/06/96	0.000	Set 1	159
WG-19	11/06/96	0.000	Set 1	52.7
WG-20	11/06/96	0.000	Set 1	46.6
WG-21	11/06/96	0.000	Set 1	116
WG-22	11/06/96	0.000	Set 1	439
WG-23	11/06/96	0.000	Set 1	376
WG-24	11/06/96	0.000	Set 1	243
WG-25	11/06/96	0.000	Set 1	589
WG-26	11/06/96	0.000	Set 1	962
WG-27	11/06/96	0.000	Set 1	397
WG-28	11/06/96	0.000	Set 1	578
WG-29	11/06/96	0.000	Set 1	482
WG-30	11/06/96	0.000	Set 1	370
WG-31	11/06/96	0.000	Set 1	199
WG-32	11/06/96	0.000	Set 1	441
WG-33	11/06/96	0.000	Set 1	302
WG-34	11/06/96	0.000	Set 1	146

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL 7421TL

Page: 2A of 2A
Date: 01/08/97

SITE	DATE	DEPTH (m)	RESULT TYPE	Lead (mg/kg)
WG-35	11/06/96	0.000	Set 1	41.3
WG-36	11/06/96	0.000	Set 1	384
WG-37	11/06/96	0.000	Set 1	642
WG-38	11/06/96	0.000	Set 1	480
WG-39	11/06/96	0.000	Set 1	284
WG-40	11/06/96	0.000	Set 1	115
WG-41	11/06/96	0.000	Set 1	31.2
WG-42	11/06/96	0.000	Set 1	392
WG-43	11/06/96	0.000	Set 1	18
WG-43	11/06/96	0.229	Set 1	25.7

For RCL 7421TL

4.0 Review of Potential Sources of Lead in Soil

An evaluation of available lead-in-air concentrations measured at an Exide ambient air monitor station located near the trailer park was performed in attempt to determine if air emissions from the Exide facility may have contributed to soil impacts in the trailer park. The Exide air monitoring station located nearest to the trailer park is the #1 sampler (see Figure 4.) This data shows that the measured lead-in-air near the park has been below the National Ambient Air Quality Standard (NAAQS) for lead of $1.5 \mu\text{g}/\text{m}^3$, and has generally decreased over time. This indicates that emissions from the Exide facility have not caused residents of Westgate Trailer Park to be exposed to lead-in-air at levels above the NAAQS. The NAAQS defines a level of air quality that is protective of human health and the environment. This lead-in-air data is therefore also an indication that air emissions from the facility did not contribute to soil impacts in the trailer park.

Information on surface water runoff patterns was also evaluated to determine if surface water runoff may have been a contributor to lead concentrations found in the trailer park. Review of this information indicates that no surface water runoff from the facility flows in the direction of the park, therefore eliminating it as a possible contributor.

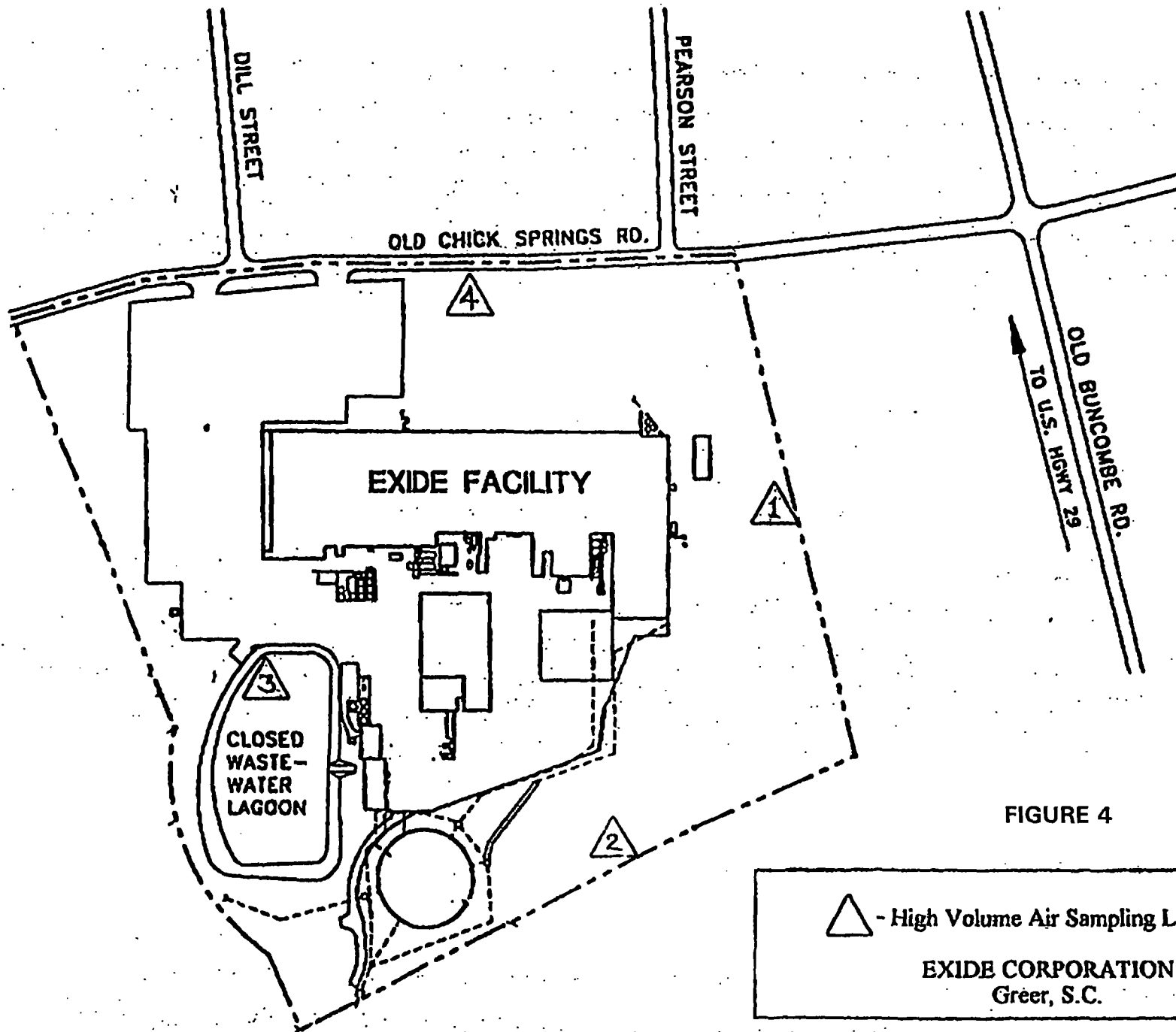


FIGURE 4

△ - High Volume Air Sampling Locations

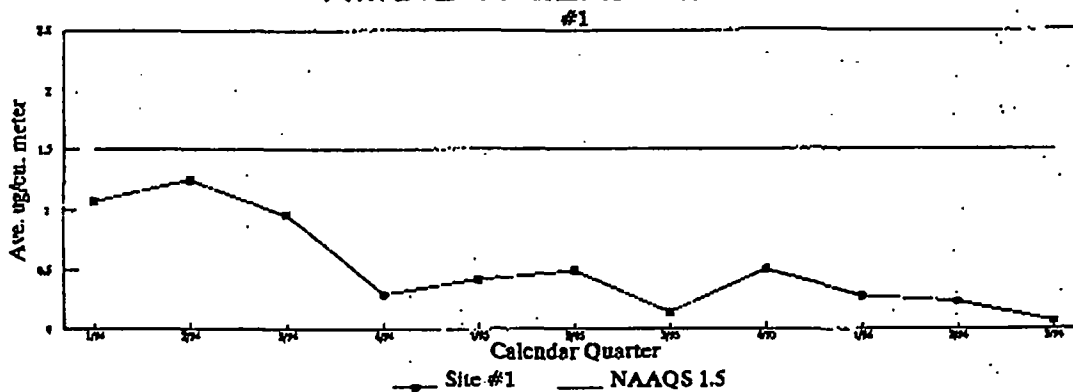
EXIDE CORPORATION
Greer, S.C.

TABLE 2

AMBIENT AIR SAMPLING RESULTS**#1****QUARTERLY AVERAGES**Lead-in-Air ug/cu. meter

Calendar Quarter	Site #1
1/94	1.08
2/94	1.25
3/94	0.96
4/94	0.29
1/95	0.42
2/95	0.49
3/95	0.14
4/95	0.50
1/96	0.28
2/96	0.23
3/96	0.06

National Ambient Air Quality Standard = 1.5 ug/cu. meter quarterly average

AMBIENT LEAD-IN-AIR

Appendix A

Consent Order 96-12-HW

THIS IS A TRUE COPY OF DEPARTMENT OF HEALTH
& ENVIRONMENTAL CONTROL RECORDS

Reese P. Healy

THE STATE OF SOUTH CAROLINA

BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IN RE: EXIDE CORPORATION
SCD 042 633 859
GREENVILLE COUNTY

CONSENT ORDER
96-12-JHW

General Battery Corporation, a wholly-owned subsidiary of Exide Corporation, owns a lead-acid battery manufacturing facility in Greer, South Carolina, which is leased and operated by Exide Corporation ("facility" or "site").

FINDINGS OF FACT

In the early 1960's, Bowers Battery (which later changed its name to General Battery and Ceramic Corporation and in 1968, to General Battery Corporation) began operation at the Greer facility. Exide Corporation began operation at the site in May of 1987.

An earthen lagoon was constructed at the facility in the early 1960's by Bowers Battery for the treatment of industrial wastewater. Subsequently the groundwater became contaminated with lead and sulfates. In 1977, General Battery Corporation constructed a neutralization system at the plant site for pretreatment of wastewater prior to discharge into the city sewer system. The lagoon was not used for the treatment of industrial wastewater after the completion of the pretreatment system and the lagoon was properly closed in 1982.

On June 8, 1984, the Department issued a permit for the construction of a groundwater recovery and treatment program for groundwater remediation. The recovery and treatment facility was constructed and remains in operation to date.

In April, 1986, the Department determined that the soil in the drainage areas at the back of the plant site was contaminated with lead. On July 8, 1986, Administrative Consent Order 86-36-SW between the Department and General Battery Corporation was executed which required the submittal of the site assessment plan for a comprehensive study of the facility to identify all areas of soil contamination. A site assessment was submitted by General Battery Corporation and approved by the Department to address contamination at the facility. During implementation of the approved plan, Exide Corporation removed approximately 1039 tons of contaminated soil, of which 854 tons were determined to be a characteristically hazardous waste for lead. The area where the soils were removed was limed at a rate of 2000 lbs/acre, graded and hydro-seeded. On August 24, 1990, Exide Corporation notified the Department that the soil remediation was complete.

On February 21, 1991, the Department received a citizen's complaint which was related to the removal of soil from the Exide plant site.

On February 22, 1991, Department personnel met with Exide representatives to discuss the citizen's complaint. Exide personnel told the Department that it was in the process of extending the raw materials container storage area at the site. The soil was excavated and stockpiled onsite, then regraded to allow for the proper fill material to be placed prior to the asphalt. It was determined that, on or about January 18, 1991, the unused, excavated soil was taken to Cochran Motors property, located at 1455 Wade Hampton Boulevard in Greenville County, where it was used as fill by the owner of the Cochran Motors' property. The Department and Exide collected split samples at the Cochran Motor's site. A composite sample was collected from various locations along the surface of the fill area. Exide's results, as analyzed and reported by an independent laboratory indicated a total lead concentration of 2100 ppm and a Toxicity Characteristic Leaching Procedure ("TCLP")

lead concentration of 73 ppm. Department results were 7500 ppm total lead. Based on Exide's results, the soil excavated from the Exide plant site and transported and disposed of offsite by Exide is considered a hazardous waste by characteristic.

On April 3, 1991, the Department issued a Notice of Violation to Exide citing violations and scheduling an enforcement conference for April 25, 1991, to discuss the cited violations. During the enforcement conference, Exide told the Department that on January 18, 1991, approximately 100 cubic yards of soil was removed from Exide's property and disposed of offsite by a contractor. (In an affidavit submitted by Exide on June 7, 1991, the contractor (T & G Construction) stated that it removed approximately 80 to 90 cubic yards from Exide's property).

On March 15, 1991, Exide initiated the removal of the contaminated soil from the Cochran Motors' fill site. The contaminated soil was transported by a permitted hazardous waste transporter to a permitted hazardous waste disposal facility.

On June 7, 1991, Exide submitted to the Department the "Final Report of Soil Clean-up/Remedial Activities" ("Report") to document the efforts which were undertaken by Exide to remove the soil from the Cochran Motors' property. A narrative was not included in the Report. The Department has determined the following based on information from the Report:

- 1) The Cochran Motors dump site is located on an area approximately 95 feet by 75 feet. A creek is located to the east of the dump site
- 2) Between March 15, 1991 and March 29, 1991, Exide excavated and removed four hundred two thousand, three hundred and eighty pounds (402,380 lbs.) of soil including lead contaminated soil with asphalt and gravel and delivered the material to a permitted hazardous waste disposal facility.

3) In order to verify the adequacy of Exide's removal activities, the Cochran Motors' fill site was divided into six areas for sampling. Also, two surface water samples were scheduled to be collected from the creek.

4) On April 5, 1991, composite soil samples were collected and analyzed by Exide's consultant from each sample area. TCLP lead levels from the six sampling points were 13 mg/l, 12 mg/l, 21 mg/l, 11 mg/l, <.31 mg/l and 5 mg/l. Also, on April 5, 1991, two surface water grab samples were collected from the creek. Based upon data submitted by Exide, Sample #3 (upstream) results were .06 mg/l lead while sample #8 (downstream) results were .04 mg/l lead.

5) Following receipt of laboratory data for soil samples collected on April 5, 1991, Exide completed the excavation and disposal of additional soil from the Cochran Motors' site. On April 22, 1991, grab soil samples were collected (with the exception of sample area #6 from which no additional soil was removed) to verify the adequacy of the second removal. TCLP lead levels from five sample points were reported as 10 mg/l, .2 mg/l, .5 mg/l, .14 mg/l, and .04 mg/l. Following receipt of the data, Exide initiated additional removal of soil a sample area #1.

6) Between April 22, 1991 and May 22, 1991, one hundred sixteen thousand, five hundred and sixty pounds (116,560 lbs.) of soil including lead contaminated soil with asphalt and gravel was excavated from the Cochran Motors' site by Exide. During the entire removal process, Exide excavated five hundred eighteen thousand, nine hundred and forty pounds (518,940 lbs.) of soil including lead contaminated soil with asphalt and gravel and delivered the material to the hazardous waste disposal facility.

7) On May 23, 1991, a soil grab sample was collected from sample area #1. Exide's results indicated a total lead concentration of 190 mg/kg and a TCLP lead concentration of 2.3 mg/L.

On August 1, 1991, Exide submitted to the Department a narrative explaining the sampling and remediation activities at the Cochran Motors' site. The narrative included number and locations of soil composite samples and a review of reasons for the collection and analysis of soil samples during the second and third sampling rounds.

On August 16, 1991, the Department issued a letter to Exide requesting that arrangements be initiated with the Department to conduct additional sampling at the Cochran Motors' site to determine background conditions.

On November 4, 1991, the Department received the results from additional sampling conducted by Exide at the Cochran Motors' site and determined that restoration of the site should commence as soon as possible.

CONCLUSIONS OF LAW

Exide has violated the South Carolina Hazardous Waste Management Regulations, 25 S.C. Code Regs. 61-79 (Law Co-op. 1976 & Supp. 1994), promulgated pursuant to the South Carolina Hazardous Waste Management Regulations, South Carolina Code Ann. Sections 44-56-10 ~~et seq.~~ (Law Co-op. 1976 & Supp. 1994). Exide has violated the following:

- 1) R.61-79.262.11, for failure to make a hazardous waste determination;
- 2) R.61-79.262.12(c), for offering hazardous waste to a transporter or disposal facility that has not received an EPA Identification Number and a Department permit;
- 3) R.61-79.262.20(a), for not preparing a manifest before offering hazardous waste for transportation offsite;
- 4) R.61-79.262 Subpart C, Pre-Transport Requirements, for failure to properly package, label, mark and placard hazardous waste before offering the hazardous waste for transportation

offsite;

5) R.61-79.270.1(b), for disposing of a hazardous waste without first applying for and receiving a Department permit for that activity.

Also, Exide has violated the Pollution Control Act, South Carolina Code Ann. Sections 48-1-10 et seq. (Law Co-op 1976 & Supp. 1994) in that it is unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department.

NOW THEREFORE IT IS ORDERED with the consent of Exide and pursuant to Sections 48-1-50, 44-56-130, and 44-56-140 of said Code, as amended, that Exide agrees to the following:

- 1) Ensure future compliance with the South Carolina Hazardous Waste Management Regulations;
- 2) Ensure future compliance with the Pollution Control Act;
- 3) Within thirty (30) days of the effective date of this order, provide to the Department for approval, documentation that the Cochran Motors' site has been properly remediated and restored;
- 4) Within thirty (30) days of the effective date of this order, submit, to the Department for approval, a Site Assessment Work Plan ("SAWP") for the entire Exide facility, to identify areas of soil lead contamination and potential soil lead contamination at the site. The SAWP shall address all areas where spillage and runoff might have occurred, or could occur, causing an adverse impact to the environment, including vegetated areas and covered areas including, but not limited to, asphalt and concrete parking areas. The SAWP shall evaluate the vertical and horizontal extent of lead contamination and potential lead contamination. The SAWP shall also include a schedule for all

major work activities under the SAWP. Within thirty (30) days of notification of approval of the SAWP by the Department, Exide will initiate the soil sampling in accordance with the approved plan and schedule.

5) Within forty-five (45) days of completion of the work required under the SAWP, Exide shall submit a written report to the Department outlining all sample results. This report shall also include, for Department approval, a Remediation Plan for the proper remediation of any soil or groundwater contamination consistent with continued use of the facility and land use in the area. Remediation in accordance with the Department approved Remediation Plan shall begin within thirty (30) days of Department approval of said plan. A final report shall be submitted to the Department, within thirty (30) days of completing remediation, to document remedial activities.

6) Within thirty (30) days of Department approval of the written report submitted after completion of the Focused Investigation/Study Work Plan for the Kings Acres Subdivision as described in Consent Agreement 95-30-HW, submit to the Department a remediation plan to address removal and proper disposal of all soils with a total lead level value as deemed necessary by the Department.

7) Within sixty (60) days of the effective date of this order, submit to the Department a Remedial Investigation Work Plan ("RI") to investigate lead contamination in the Westgate Trailer Park. The RI shall include, but not be limited to, investigation of the source(s), adequate delineation of all potential areas of contamination, evaluation of remedial alternatives and a Risk Assessment for Westgate Trailer Park as deemed necessary by the Department.

8) If the Department determines that remediation of the Westgate Trailer Park is necessary, Exide shall submit a Remediation Plan for Westgate Trailer Park to address removal and

proper disposal of all contaminated soils as deemed necessary by the Department. This Remediation Plan shall include an approvable schedule for all major work activities described in the Remediation Plan.

9) All plans submitted to the Department for approval shall be consistent with the technical intent of the National Contingency Plan. All Occupational Safety and Health Act (OSHA) regulations and protocols shall be followed.

10) If any event occurs which causes or may cause a delay in meeting any of the above-scheduled dates for completion of any specified activity pursuant to the approved Work Plan, Exide shall notify the Department in writing at least five (5) days before the scheduled date. Exide shall describe in detail the anticipated length of the delay, the precise cause or causes of delay, if ascertainable, the measures taken or to be taken to prevent or minimize the delay, and the timetable by which Exide proposes that those measures will be implemented. The Department shall provide written notice to Exide as soon as practicable that a specific extension of time has been granted or that no extension has been granted. An extension shall be granted for any scheduled activity delayed by an event of force majeure which shall mean any event arising from causes beyond the control of Exide that causes a delay in or prevents the performance of any of the conditions under this Consent Order including, but not limited to: a) acts of God, fire, war, insurrection, civil disturbance, explosion; b) adverse weather conditions that could not be reasonably anticipated causing unusual delay in transportation and/or field work activities; c) restraint by court order or order of public authority; d) inability to obtain, after exercise of reasonable diligence and timely submittal of all applicable applications, any necessary authorizations, approvals, permits, or licenses due to action or inaction of any governmental agency or authority; and e) delays caused by compliance with

applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence by Exide. Events which are not force majeure include by example, but are not limited to, unanticipated or increased costs of performance, changed economic circumstances, normal precipitation events, or failure by Exide to exercise due diligence in obtaining governmental permits or performing any other requirement of this Order or any procedure necessary to provide performance pursuant to the provisions of this Order. Any extension shall be granted at the sole discretion of the Department, incorporated by reference as an enforceable part of this Consent Order, and, thereafter, be referred to as an attachment to the Consent Order.

11) The Department agrees that access to property owned by Exide will be restricted to representatives of Exide, its consultants, contractors and invited guests except as modified herein. Employees of the Department and the EPA and their respective consultants and contractors will not be denied access during normal business hours or at any time work under the approved Work Plan is being performed or during any environmental emergency or imminent threat situation, as determined by the Department (or as permitted by applicable law). Exide shall make reasonable efforts (which shall include but not be limited to written requests to the property owners requesting access, describing the activity for which access is requested, and a commitment to return the property to the condition it was in prior to the activity for which Exide sought access) to gain access to any property not owned by Exide but affected by the work in this Consent Order. The Department shall not be a party to any contract, lease, or other agreement between Exide and the property owner. The Department shall determine in its discretion whether Exide has made good faith efforts to obtain access to any property necessary to comply with this Order.

12) With regards to third party actions, Exide does not admit, accept or concede the

Findings of Fact or Conclusions of Law set forth in this Consent Order and specifically reserves the right to contest any such Findings of Fact or Conclusions of Law in any third party action regarding the Site. The Consent Order shall be admissible in any enforcement action brought by the Department but may not be utilized by third parties against Exide as proof of any allegations, findings or conclusions contained herein.

13) Exide specifically denies any responsibility for response costs or damages, and does not, by signing this Consent Order, waive any rights which it may have to assert any claims in law or equity against any other person, company or entity with respect to the Site.

IT IS FURTHER ORDERED AND AGREED that failure to comply with the requirements of this Order shall be deemed a violation of the South Carolina Hazardous Waste Management Act and the South Carolina Pollution Control Act and therefore shall be deemed unlawful. Upon ascertaining any such violation, the Department may promptly initiate appropriate action to obtain compliance with both this Order and the aforesaid Acts including but not limited to the assessment of a civil penalty of up to the statutory limit of twenty-five thousand dollars (\$25,000.00) per day per violation for the violations cited herein.

THE SOUTH CAROLINA DEPARTMENT OF
HEALTH AND ENVIRONMENTAL CONTROL

DATE: 4/9/96

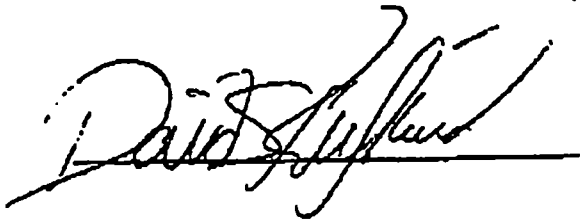
BY: Douglas E Bryant
Douglas E Bryant, Commissioner

WE CONSENT:

EXIDE CORPORATION

John P. Barlow

DATE: April 3, 1996



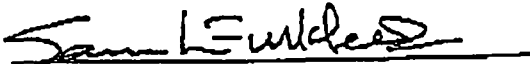
DATE: April 3/1996

THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



DATE: 4/9/96

Hartsill W. Truesdale, P.E., Chief
Bureau of Solid and Hazardous
Waste Management



DATE: 4/9/96

Approved by: Legal Office

Appendix B
Representative Sample Location Photographs



Sample Location WG-06
Westgate Trailer Park



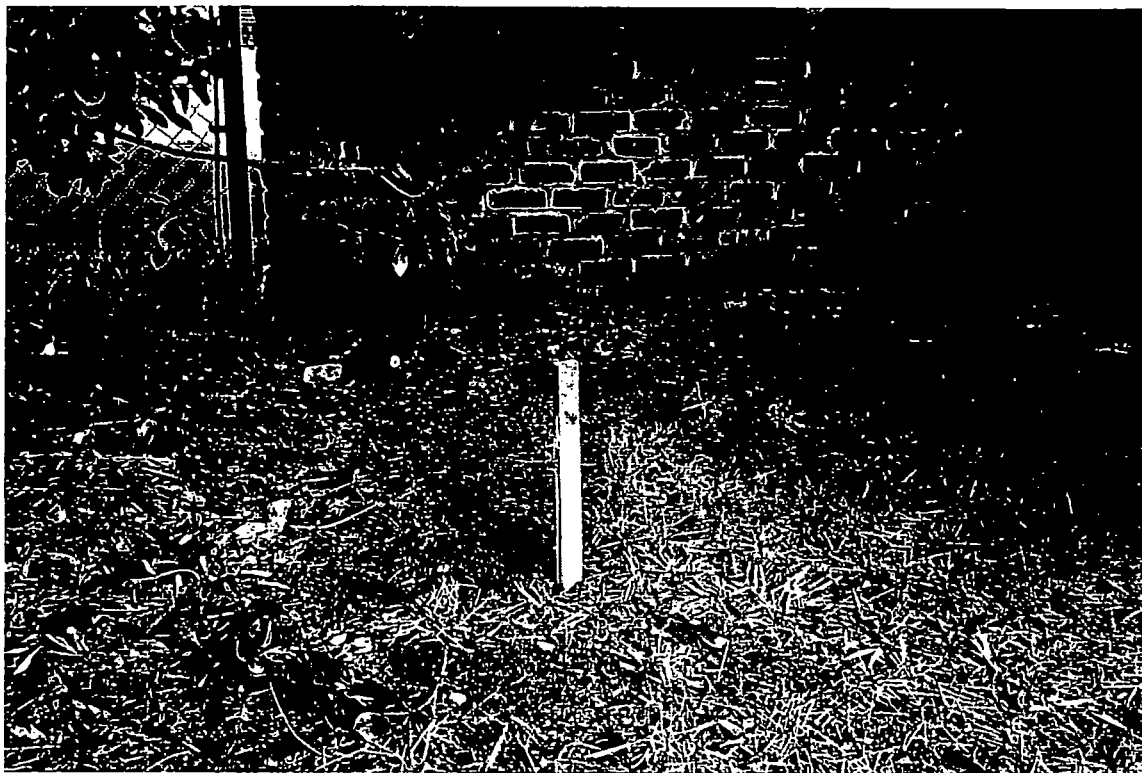
Sample Location WG-07
Westgate Trailer Park



Sample Location WG-08
Westgate Trailer Park



Sample Location WG-09
Westgate Trailer Park



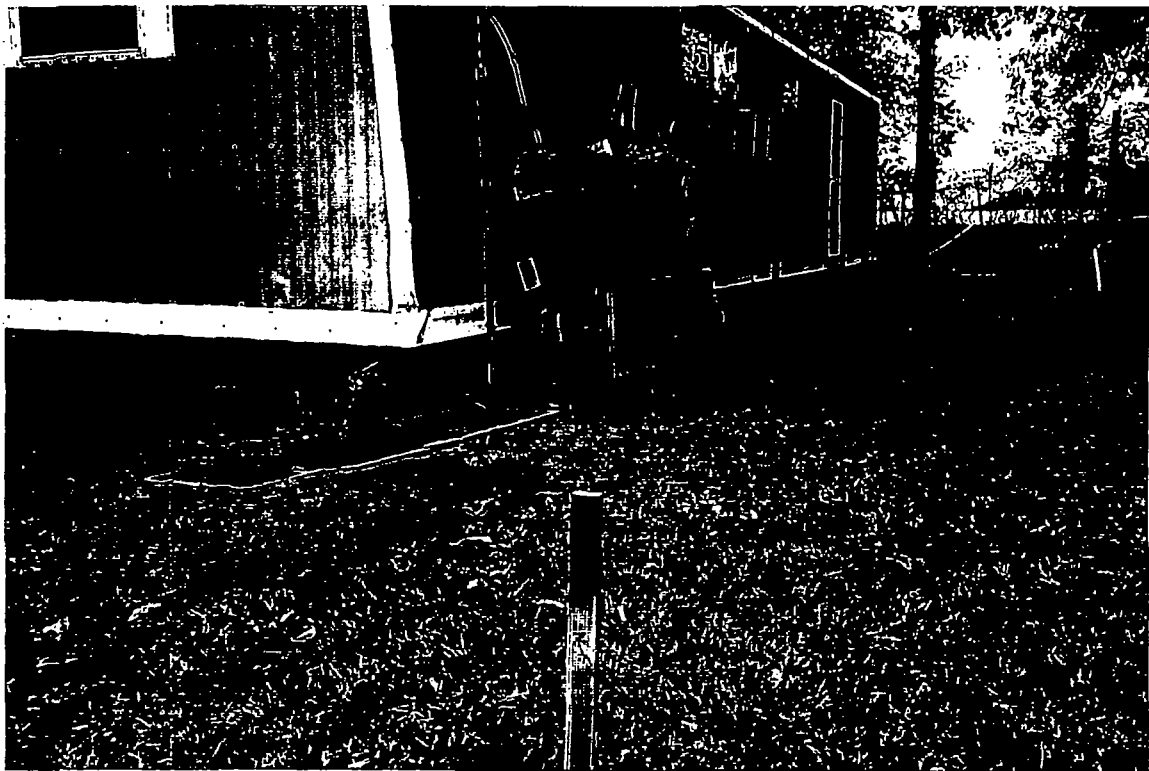
Sample Location WG-10
Westgate Trailer Park



Sample Location WG-11
Westgate Trailer Park



Sample Location WG-14
Westgate Trailer Park



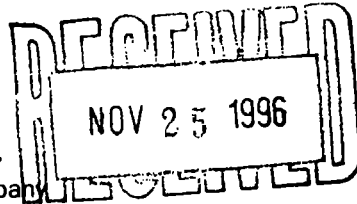
Sample Location WG-15
Westgate Trailer Park

Appendix C
Laboratory Report and Chain of Custody Form



IEA

An Aquarion Company



IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677-0090
Fax 919-677-0427

November 21, 1996

Kathy Webb
Fletcher Group
Datastream Building
30 Bruce Road, Suite 101
Greenville, SC 29605

IEA Project No.: 1834021/9611209
IEA Reference No.: W9611190
Client Project I.D.: 265.06 Westgate Trailer Park

Dear Ms. Webb,

Transmitted herewith are the results of analyses on 48 samples submitted to our laboratory.

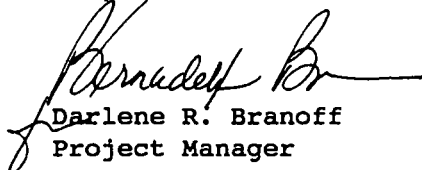
The samples were received intact.

Analyses were performed according to approved methodologies and meet the requirements of the IEA Quality Assurance Program except where noted. Please see the enclosed reports for your results and a copy of the Chain of Custody documentation.

Thank you for selecting IEA for your sample analysis. Please do not hesitate to call me at 1-919-677-0090 or 1-800-444-9919 should you have any questions regarding this report. We look forward to serving you in the future.

Very truly yours,

IEA, Inc.


Darlene R. Branoff
Project Manager



Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021
IEA Sample #: 961120901
Client Name: Fletcher Group
Client Proj. I.D.: 265.06 Westgate Trailer Park
Sample I.D.: WG-09
Matrix: SOIL
Date Received: 11/08/96
Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.378	1030	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120902

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-08

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.346	510.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120903

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-07

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run Batch
LEAD	SW846 6010	0.353	1420	11/12/96	11/14/96	RH	R8743 11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120904

Matrix: SOIL

Client Name: Fletcher Group

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-06

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.338	638.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120905

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-13

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.328	441.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120906

Matrix: SOIL

Client Name: Fletcher Group

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-12

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.438	764.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120907

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-11

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.349	837.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120908

Matrix: SOIL

Client Name: Fletcher Group

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-10

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.324	572.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120909

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-14

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.357	1610	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120910

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-05

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.350	513.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120911

Matrix: SOIL

Client Name: Fletcher Group

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-15

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.412	1460	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021
IEA Sample #: 961120912
Client Name: Fletcher Group
Client Proj. I.D.: 265.06 Westgate Trailer Park
Sample I.D.: WG-04
Matrix: SOIL
Date Received: 11/08/96
Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.328	280.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120913

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-16

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.319	86.7	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120914

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-03

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.362	434.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120915

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-103

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.355	453.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120916

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-17

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.306	45.8	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021
IEA Sample #: 961120917
Client Name: Fletcher Group
Client Proj. I.D.: 265.06 Westgate Trailer Park
Sample I.D.: WG-02
Matrix: SOIL
Date Received: 11/08/96
Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.362	373.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120918

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-18

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.308	159.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120919

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-01

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.368	494.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120920

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-40

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.309	115.	11/12/96	11/14/96	RH	R8743	11129607P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120921

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-39

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.350	284.	11/12/96	11/14/96	MH	R8747	11129608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120922

Matrix: SOIL

Client Name: Fletcher Group

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-41

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.341	31.2	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120923

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-19

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.305	52.7	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120924

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-20

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Run	Prep Batch
LEAD	SW846 6010	0.307	46.6	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120925

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-21

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.344	116.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120926

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-22

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.367	439.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120927

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-23

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.350	376.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120928

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-24

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Run	Prep Batch
LEAD	SW846 6010	0.318	243.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120929

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-25

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.335	589.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120930

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-26

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.346	962.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120931

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-27

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.345	397.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120932

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-28

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.383	578.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120933

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-128

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.361	601.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120934

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-42

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.332	392.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120935

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-29

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.339	482.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021
IEA Sample #: 961120936
Client Name: Fletcher Group
Client Proj. I.D.: 265.06 Westgate Trailer Park
Sample I.D.: WG-38
Matrix: SOIL
Date Received: 11/08/96
Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
LEAD	SW846 6010	0.322	480.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120937

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-30

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.395	370.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120938

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample I.D.: WG-37

Matrix: SOIL

Date Received: 11/08/96

Date Sampled: 11/06/96

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.350	642.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120939

Matrix: SOIL

Client Name: Fletcher Group

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-31

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.349	199.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120940

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-36

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Run	Prep Batch
LEAD	SW846 6010	0.319	384.	11/12/96	11/15/96	MH	R8747	11129608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120941

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-32

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	IEA Run	Prep Batch
LEAD	SW846 6010	0.318	441.	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120942

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-132

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.322	290.	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120943

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-35

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Run	Prep Batch
LEAD	SW846 6010	0.312	41.3	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120944

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-33

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.374	302.	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120945

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-34

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.301	146.	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120946

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-43,0-3"

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.310	18.0	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834_021

IEA Sample #: 961120947

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-43,9-12"

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.379	25.7	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 1834 021

IEA Sample #: 961120948

Client Name: Fletcher Group

Matrix: SOIL

Date Received: 11/08/96

Client Proj. I.D.: 265.06 Westgate Trailer Park

Date Sampled: 11/06/96

Sample I.D.: WG-30 DUPLICATE

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.351	346.	11/13/96	11/14/96	RH	R8743	11139608P

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 1834_021

Matrix: SOIL

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample Number: PBS 11129607P

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	IEA Analyst	Prep Run	Batch
LEAD	SW846 6010	0.300	BQL	11/12/96	11/14/96	RH	R8743	11129607P

Corresponding Samples:

961120901, 961120902, 961120903, 961120904, 961120905, 961120906,
961120907, 961120908, 961120909, 961120910, 961120911, 961120912,
961120913, 961120914, 961120915, 961120916, 961120917, 961120918,
961120919, 961120920

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 1834_021

Matrix: SOIL

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample Number: PBS 11129608P

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
LEAD	SW846 6010	0.300	BQL	11/12/96	11/14/96	MH	R8747	11129608P

Corresponding Samples:

961120921, 961120922, 961120923, 961120924, 961120925, 961120926,
961120927, 961120928, 961120929, 961120930, 961120931, 961120932,
961120933, 961120934, 961120935, 961120936, 961120937, 961120938,
961120939, 961120940

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 1834_021

Matrix: SOIL

Client Name: Fletcher Group

Client Proj. I.D.: 265.06 Westgate Trailer Park

Sample Number: PBS 11139608P

Parameter	Method	Quant Limit	Result (mg/kg)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
LEAD	SW846 6010	0.300	BQL	11/13/96	11/14/96	RH	R8745	11139608P

Corresponding Samples:

961116701, 961116702, 961116703, 961116704, 961116705, 961117701,
961117702, 961117704, 961117705, 961120941, 961120942, 961120943,
961120944, 961120945, 961120946, 961120947, 961120948

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
LABORATORY CONTROL SAMPLE

IEA Project #: 1834_021
IEA Sample #: LCSS 11129607P
Matrix: SOIL

Parameter	Method	Results (mg/kg)		Limits		%	Date	IEA	Prep
		True	Found	Lower	Upper				
LEAD	SW846 6010	122	111.	82.7	160	91.3	11/14/96	R8743	11129607P

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
LABORATORY CONTROL SAMPLE

EA Project #: 1834_021
IEA Sample #: LCSS 11129608P
Matrix: SOIL

Parameter	Method	Results (mg/kg)		Limits		% RCY	Date Analyzed	IEA Run	Prep Batch
		True	Found	Lower	Upper				
LEAD	SW846 6010	122	106.	82.7	160	87.2	11/14/96	R8747	11129608P

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
LABORATORY CONTROL SAMPLE

IEA Project #: 1834_021
IEA Sample #: LCSS 11139608P
Matrix: SOIL

Parameter	Method	Results (mg/kg)		Limits		% RCY	Date Analyzed	IEA Run	Prep Batch
		True	Found	Lower	Upper				
LEAD	SW846 6010	122	99.5	82.7	160	81.6	11/14/96	R8745	11139608P

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

EA Project #: 1834 021
IEA Sample #: 961116701
Matrix: SOIL

Parameter	Method	Duplicate Analysis			Date Analyzed	Samp Run	Dup Run	Prep Batch
		Sample (mg/kg)	Duplicate (mg/kg)	RPD %				
LEAD	SW846 6010	12.6	10.8	15.4	11/14/96	R8745	R8745	11139608P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:

961116701, 961116702, 961116703, 961116704, 961116705, 961117701,
961117702, 961117704, 961117705, 961120941, 961120942, 961120943,
961120944, 961120945, 961120946, 961120947, 961120948

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

IEA Project #: 1834_021
IEA Sample #: 961120901
Matrix: SOIL

Parameter	Method	Duplicate Analysis			Date Analyzed	Samp Run	Dup Run	Prep Batch
		Sample (mg/kg)	Duplicate (mg/kg)	RPD %				
LEAD	SW846 6010	1030	1590	42.7	11/14/96	R8743	R8743	11129607P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:

961111601, 961111602, 961111603, 961120901, 961120902, 961120903,
961120904, 961120905, 961120906, 961120907, 961120908, 961120909,
961120910, 961120911, 961120912, 961120913, 961120914, 961120915,
961120916, 961120917, 961120918, 961120919, 961120920, 961120921,
961120922, 961120923, 961120924, 961120925, 961120926, 961120927,
961120928, 961120929, 961120930, 961120931, 961120932, 961120933,
961120934, 961120935, 961120936, 961120937, 961120938, 961120939,
961120940

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

EA Project #: 1834_021
IEA Sample #: 961120921
Matrix: SOIL

		Duplicate Analysis						
Parameter	Method	Sample (mg/kg)	Duplicate (mg/kg)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
LEAD	SW846 6010	284.	264.	7.32	11/14/96	R8747	R8747	11129608P

$$\text{RPD} = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:

961111601, 961111602, 961111603, 961120901, 961120902, 961120903,
961120904, 961120905, 961120906, 961120907, 961120908, 961120909,
961120910, 961120911, 961120912, 961120913, 961120914, 961120915,
961120916, 961120917, 961120918, 961120919, 961120920, 961120921,
961120922, 961120923, 961120924, 961120925, 961120926, 961120927,
961120928, 961120929, 961120930, 961120931, 961120932, 961120933,
961120934, 961120935, 961120936, 961120937, 961120938, 961120939,
961120940

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

IEA Project #: 1834_021
IEA Sample #: 961116701
Matrix: SOIL

Spike Results (mg/kg)

Parameter	Method	SA	SR	SSR	%RCY	Date Analyzed	Samp Run	Spike Run	Prep Batch
LEAD	SW846 6010	56.9	12.6	60.8	84.7	11/14/96	R8745	R8745	11139608P

$$\%R = ((SSR - SR) / SA) * 100$$

Control Limits: 75-125%

Corresponding Samples:

961116701, 961116702, 961116703, 961116704, 961116705, 961117701,
961117702, 961117704, 961117705, 961120941, 961120942, 961120943,
961120944, 961120945, 961120946, 961120947, 961120948

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

EA Project #: 1834 021
EA Sample #: 961120901
Matrix: SOIL

Parameter	Method	Spike Results (mg/kg)				Date Analyzed	Samp Run	Spike Run	Prep Batch
		SA	SR	SSR	%RCY				
LEAD	SW846 6010	62.3	1030	1510	759.	11/14/96	R8743	R8743	11129607P

$\%R = ((SSR - SR) / SA) * 100$

Control Limits: 75-125%

Corresponding Samples:

961111601, 961111602, 961111603, 961120901, 961120902, 961120903,
961120904, 961120905, 961120906, 961120907, 961120908, 961120909,
961120910, 961120911, 961120912, 961120913, 961120914, 961120915,
961120916, 961120917, 961120918, 961120919, 961120920, 961120921,
961120922, 961120923, 961120924, 961120925, 961120926, 961120927,
961120928, 961120929, 961120930, 961120931, 961120932, 961120933,
961120934, 961120935, 961120936, 961120937, 961120938, 961120939,
961120940

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

IEA Project #: 1834 021
IEA Sample #: 961120921
Matrix: SOIL

Spike Results (mg/kg)

Parameter	Method	SA	SR	SSR	%RCY	Date Analyzed	Samp Run	Spike Run	Prep Batch
LEAD	SW846 6010	47.5	284.	315.	64.2	11/14/96	R8747	R8747	11129608P

$$\%R = ((SSR - SR) / SA) * 100$$

Control Limits: 75-125%

Corresponding Samples:

961111601, 961111602, 961111603, 961120901, 961120902, 961120903,
961120904, 961120905, 961120906, 961120907, 961120908, 961120909,
961120910, 961120911, 961120912, 961120913, 961120914, 961120915,
961120916, 961120917, 961120918, 961120919, 961120920, 961120921,
961120922, 961120923, 961120924, 961120925, 961120926, 961120927,
961120928, 961120929, 961120930, 961120931, 961120932, 961120933,
961120934, 961120935, 961120936, 961120937, 961120938, 961120939,
961120940

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

EA Project #: 1834 021
IEA Sample #: 961116701S
Matrix: SOIL

Spike Duplicate Results

Parameter	Method	Sample (mg/kg)	Duplicate (mg/kg)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
LEAD	SW846 6010	60.8	60.6	0.43	11/14/96	R8745	R8745	11139608P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:

961116701, 961116702, 961116703, 961116704, 961116705, 961117701,
961117702, 961117704, 961117705, 961120941, 961120942, 961120943,
961120944, 961120945, 961120946, 961120947, 961120948

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

IEA Project #: 1834_021
IEA Sample #: 961120901s
Matrix: SOIL

Spike Duplicate Results

Parameter	Method	Sample (mg/kg)	Duplicate (mg/kg)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
LEAD	SW846 6010	1510	1540	2.11	11/14/96	R8743	R8743	11129607P

$$\text{RPD} = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:

961111601, 961111602, 961111603, 961120901, 961120902, 961120903,
961120904, 961120905, 961120906, 961120907, 961120908, 961120909,
961120910, 961120911, 961120912, 961120913, 961120914, 961120915,
961120916, 961120917, 961120918, 961120919, 961120920, 961120921,
961120922, 961120923, 961120924, 961120925, 961120926, 961120927,
961120928, 961120929, 961120930, 961120931, 961120932, 961120933,
961120934, 961120935, 961120936, 961120937, 961120938, 961120939,
961120940

Comments:

client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

IEA Project #: 1834_021
IEA Sample #: 961120921S
Matrix: SOIL

Parameter	Method	Spike Duplicate Results			Date Analyzed	Samp Run	Dup Run	Prep Batch
		Sample (mg/kg)	Duplicate (mg/kg)	RPD %				
LEAD	SW846 6010	315.	297.	5.90	11/14/96	R8747	R8747	11129608P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:

961111601, 961111602, 961111603, 961120901, 961120902, 961120903,
961120904, 961120905, 961120906, 961120907, 961120908, 961120909,
961120910, 961120911, 961120912, 961120913, 961120914, 961120915,
961120916, 961120917, 961120918, 961120919, 961120920, 961120921,
961120922, 961120923, 961120924, 961120925, 961120926, 961120927,
961120928, 961120929, 961120930, 961120931, 961120932, 961120933,
961120934, 961120935, 961120936, 961120937, 961120938, 961120939,
961120940

Comments:

Client-specific quantitative limits used.



IEA
An Aquarion Company

3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-677-0090
FAX # 919-677-0427

CHAIN OF CUSTODY RECORD

NO. 73451

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☒ OTHER

COMPANY

Fletcher Group

Page 1 of 5

PROJECT #

PROJECT NAME

265,06

Westgate Trailer Park

SAMPLERS (SIGNATURE)

Kathy Webb, John Chastain

SAMPLE ID DATE TIME CONT. # STATION LOCATION

SAMPLE ID	DATE	TIME	CONT. #	STATION LOCATION	# OF CONTAINERS	MATRIX		REQUESTED PARAMETERS											
						SOIL	WATER												
	11-6-96	9:20	✓	WG-09	1	✓	✓	Total Lead											
	11-6-96	9:40	✓	WG-08	1	✓	✓												
	11-6-96	9:50	✓	WG-07	1	✓	✓												
	11-6-96	10:00	✓	WG-06	1	✓	✓												
	11-6-96	10:10	✓	WG-13	1	✓	✓												
	11-6-96	10:20	✓	WG-12	1	✓	✓												
	11-6-96	10:30	✓	WG-11	1	✓	✓												
	11-6-96	10:40	✓	WG-10	1	✓	✓												
	11-6-96	10:45	✓	WG-14	1	✓	✓												
	11-6-96	10:55	✓	WG-05	1	✓	✓												

REINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED BY

DATE

TIME

IEA QUOTE NO.

IEA RUSH NO.

Kathy Webb

11-7-96

17:00

REINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY

DATE

TIME

PROJECT MANAGER (PLEASE PRINT)

P.O. NO.

Kathy Webb

REMARKS ON SAMPLE RECEIPT

IEA REMARKS

FIELD REMARKS

- ☐ BOTTLE INTACT
- ☐ CUSTODY SEALS
- ☐ PRESERVED
- ☐ SEALS INTACT
- ☐ CHILLED
- ☐ SEE REMARKS



3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-677-0090
FAX # 919-677-0427

CHAIN OF CUSTODY RECORD

NO. 73453

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☒ OTHER

COMPANY

Fletcher Group

Page 3 of 5

PROJECT #

PROJECT NAME

265.06

Westgate Trailer Park

SAMPLERS (SIGNATURE)

SAMPLE ID DATE TIME COMMENTS STATION LOCATION

OF
CONTAINERS

MATRIX

SOIL

WATER

REQUESTED PARAMETERS

Total Lead

11-6-96	13:35	✓	WG-39	1	✓	✓													
11-6-96	13:45	✓	WG-41	1	✓	✓													
11-6-96	13:55	✓	WG-19	1	✓	✓													
11-6-96	14:00	✓	WG-20	1	✓	✓													
11-6-96	14:05	✓	WG-21	1	✓	✓													
11-6-96	14:15	✓	WG-22	1	✓	✓													
11-6-96	14:25	✓	WG-23	1	✓	✓													
11-6-96	14:45	✓	WG-24	1	✓	✓													
11-6-96	14:50	✓	WG-25	1	✓	✓													
11-6-96	14:55	✓	WG-26	1	✓	✓													

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED BY

DATE

TIME

IEA QUOTE NO.

IEA RUSH NO.

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY

DATE

TIME

PROJECT MANAGER (PLEASE PRINT)

P.O. NO.

REMARKS ON SAMPLE RECEIPT

IEA REMARKS

FIELD REMARKS

- ☐ BOTTLE INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT
☐ CHILLED ☐ SEE REMARKS

CHAIN OF CUSTODY RECORD

NO. 74295

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☒ OTHER**COMPANY**

Fletcher group

Page 4 of 5

PROJECT #		PROJECT NAME		# OF CONTAINERS		MATRIX		REQUESTED PARAMETERS												
265.06		Westgate Trailer Park				SOIL	WATER	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">p627/494</div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div>												
SAMPLERS (SIGNATURE)																				
Kathy Webb, John Mastain																				
SAMPLE ID	DATE	TIME	Q.C. / I.C.	STATION LOCATION																
	11-6-96	15:05	✓	WG-27	1	✓	✓													
	11-6-96	15:10	✓	WG-28	1	✓	✓													
	11-6-96	15:15	✓	WG-128	1	✓	✓													
	11-6-96	15:15	✓	WG-42	1	✓	✓													
	11-6-96	15:25	✓	WG-29	1	✓	✓													
	11-6-96	15:30	✓	WG-38	1	✓	✓													
	11-6-96	15:35	✓	WG-30	1	✓	✓													
	11-6-96	15:35	✓	WG-37	1	✓	✓													
	11-6-96	15:50	✓	WG-31	1	✓	✓													
	11-6-96	15:55	✓	WG-36	1	✓	✓													
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY		DATE	TIME	IEA QUOTE NO.				IEA RUSH NO.								
Kathy Webb		11-7-96	17:00																	
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED FOR LAB BY		DATE	TIME	PROJECT MANAGER (PLEASE PRINT)				P.O. NO.								
								Kathy Webb												
REMARKS ON SAMPLE RECEIPT				IEA REMARKS				FIELD REMARKS												
<input type="checkbox"/> BOTTLE INTACT <input type="checkbox"/> CUSTODY SEALS <input type="checkbox"/> PRESERVED <input type="checkbox"/> SEALS INTACT <input type="checkbox"/> CHILLED <input type="checkbox"/> SEE REMARKS																				

Appendix D
Summary of Duplicate Data

APPENDIX D

Page: 1 of 4

Date: 01/08/97

SAMPLING EVENT: 96-B-04 (11/06/96 to 11/07/96)

SAMPLE TYPE: Soil

TCL ID: 7421TL

PF CODE:	Total
----------	-------

LAB ID: IEA

[illegible]

DUPLICATE DATA

Date: 01/08/97

SAMPLING EVENT: 96-B-04 (11/06/96 to 11/07/96)

SAMPLE TYPE: Soil

TCL ID: 7421TL

PF CODE:	Total
----------	-------

LAB ID: IEA

[illegible]

DUPLICATE DATA

Date: 01/08/97

ENT: 96-B-04 (11/06/96 to 11/07/96)

SAMPLE TYPE: Soil
TCL ID: 7421TL
PF CODE: Total
LAB ID: IEA

[illegible]

DATE REPORT ACCEPTED 9-11-00
DISPOSITION NERAP
SAM SIGNATURE Ralph O. Howard Jr.

Low Priority for ESI
Ralph O. Howard Jr.
5-15-97

WESTGATE MOBILE HOME
PRELIMINARY ASSESSMENT / SITE INSPECTION
SC0 000 487 687
GREENVILLE COUNTY

Prepared by : Jonathan McInnis
Reviewed by: Robert Cole
Site Assessment Section
Bureau of Solid and Hazardous Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Date : December 30, 1996

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I. SCOPE OF WORK

Under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Site Assessment Section of the South Carolina Department of Health and Environmental Control (SCDHEC) conducted a Preliminary Assessment/Site Inspection (PA/SI) at the Westgate Mobile Home Park site in Greenville County, South Carolina. The purpose of this investigation is to assess the potential threat posed to human health and the environment and to determine the need for additional CERCLA/SARA or other appropriate action. The scope of the investigation included a review of available file information and a target survey.

II. INTRODUCTION/EXECUTIVE SUMMARY

The Westgate Mobile Home Park is located at the intersection of Old Chick Springs Road and Old Buncombe Road in Greer, South Carolina in Greenville County. The trailer park was established in 1968 and consists of approximately 53 mobile homes. An Exide Battery facility (SCD 042 633 859) is located adjacent to the trailer park and has been used for the manufacture of lead acid batteries since the early 1960's.

Since 1992, several rounds of soil sampling have identified high lead levels within the trailer park. In September 1994 the USEPA excavated shallow soil from six areas with lead concentrations greater than 500 parts per million (ppm) in soil. No follow up sampling has been performed since the soil removal.

Because of high levels of lead detected on-site, the Westgate Mobile Home site would normally receive a high priority for further Federal Superfund activity. However, due to the ongoing Remedial Investigation (performed by Exide Corporation under SCDHEC Consent Order 96-12-HW), it is recommended that the site be referred to the SCDHEC Site Engineering Section for oversight of further remedial investigation/action. Future Federal Superfund investigations should consider aggregation of this site, Kings Acres Subdivision, the Exide Battery facility, and other surrounding residential areas into one site unless additional source areas are discovered.

III. SITE DESCRIPTION, HISTORY AND WASTE CHARACTERISTICS

A. Ownership History

Westgate Mobile Home Park Owner:

Bruce Reeves
2320 East North Street
Greenville, SC 29607

General Battery Corporation (a wholly-owned subsidiary of Exide Corporation)
Contact: Neal S. Lebo, Regional Environmental, Health & Safety Manager
P.O. Box 13995
Reading, PA 19612-3995

(Ref. 2)

B. Site Description

The Westgate Mobile Home site consists of approximately 52 mobile homes on a 5 acre tract at the intersection of Old Chick Springs Road and Old Buncombe Road in Greer, South Carolina (Ref. 3). Immediately adjacent to the site to the west is Exide Battery, where lead acid batteries have been manufactured since the 1960's (Ref. 3). The surrounding area is residential and commercial. See Figure I for site layout. The site coordinates are 34 degrees, 56 minutes, 16.9 seconds north latitude and 82 degrees, 15 minutes, 27.0 seconds west longitude (Ref 1).

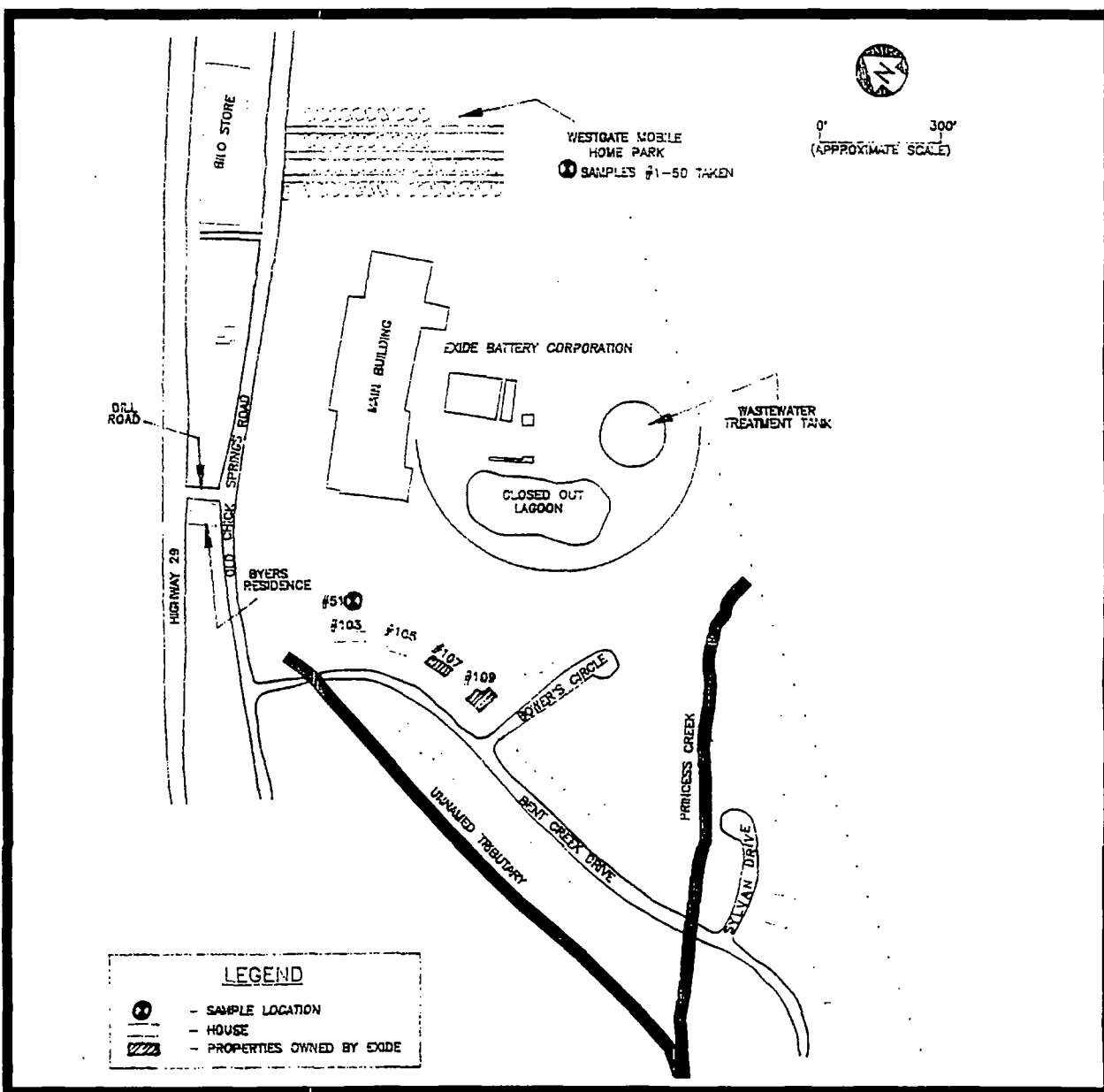


Figure 1: Westgate Mobile Home Area Layout

C. Operational / Regulatory History

According to available aerial photography, the trailer park was established between 1968 and 1970 (Ref. 3). The manufacture of lead acid batteries began adjacent to the site in the early 1960's by Bowers Battery, which later changed its name to General Battery and Ceramic Corporation, and in 1968, to General Battery Corporation. Exide Corporation began operation at the site in May 1987 (Ref. 2).

An earthen lagoon was constructed at the Exide facility in the early 1960's for treatment of industrial wastewater. Groundwater subsequently became contaminated with lead and sulfates (Ref. 2). The lagoon was not used after the construction of a neutralization system for pretreatment prior to discharge into the city sewer system in 1977 (Ref. 2). In June 1984, SCDHEC issued a permit for the construction of a groundwater recovery and treatment program. This system remains in operation to date (Ref. 2).

In April 1986, SCDHEC determined that soil in the drainage area at the rear of the property was contaminated with lead. Administrative Consent Order 86-36-SW required an assessment plan to address all areas of on-site soil contamination. During implementation of the plan, Exide removed approximately 1039 tons of soil. On August 24, 1990, Exide notified SCDHEC that soil remediation was complete (Ref. 2).

In January 1992, SCDHEC collected three soil samples from the Westgate Mobile Home site and found lead concentrations of 270 ppm, 560 ppm, and 800 ppm (Ref. 5). In June 1994, Weston, Inc. (under contract with USEPA) collected fifty-five shallow soil samples across the trailer park. Results of these analyses found total lead concentrations from 42.1 ppm up to 2110 ppm (Ref. 7). Six locations had total lead concentrations greater than 500 ppm and were excavated by USEPA. Approximately 1200 tons of contaminated soil was removed from these areas and clean soil was placed into the excavations (Ref. 4). No confirmatory sampling has been conducted at the site.

In April 1996, Exide Corporation entered into Consent Agreement 96-12-HW with SCDHEC requiring the following:

- A Site Assessment Work Plan for the entire Exide facility.
- Remediation Plan for Kings Acres Subdivision
- Remedial Investigation at Westgate, and remedial action as necessary.

D. Waste Characteristics

As a worst case scenario, the entire site (5 acres) will be assumed to be contaminated with lead. Further investigation is required to adequately define the area of contamination and identify additional sources.

IV. GROUNDWATER PATHWAY

The majority of the population within a 4-mile radius of the site obtains drinking water from either the Town of Greer water supply system or the City of Greenville water supply system (Ref. 1). Both of these municipal systems are supplied by upgradient surface water (Ref. 6). Very few private wells are located within four mile site radius. Due to the low number of groundwater targets in the immediate area, the groundwater pathway will not be evaluated for purposes of this report. The nearest well is estimated to be between $\frac{1}{4}$ and $\frac{1}{2}$ mile from the site (Ref. 1).

V. SURFACE WATER PATHWAY

Perennial surface water is located approximately $\frac{1}{2}$ mile from the site to the west (Ref. 1). A release to surface water from the Westgate site is not likely. The surface water pathway will need evaluation during further investigations at the Exide facility, due to the closed wastewater lagoon on-site.

VI. SOIL EXPOSURE PATHWAY & AIR PATHWAY

An estimated 135 people reside at Westgate Mobile Home Park, based on fifty-three mobile homes multiplied by the county average persons per household (2.54 from 1990 US Census Data). USEPA sampling in 1994 found total lead concentrations ranging from 42.1 ppm to 2110 ppm (Ref. 7). The fill material brought in after EPA's removal action contained 8.36 ppm lead, which will be considered the background level for purposes of this report (Ref. 7). Therefore, all fifty-five samples collected by USEPA in 1994 contain lead in excess of three times background values. The removal action by USEPA excavated the top 18" of soil in approximate 10 to 15 foot circles around each of the sampling points with total lead greater than 500 ppm (Ref. 4). No confirmatory sampling has been performed at the site since the removal.

VII. SUMMARY AND CONCLUSIONS

Because of high levels of lead detected on-site, the Westgate Mobile Home site would normally receive a high priority for further Federal Superfund activity. However, due to the ongoing Remedial Investigation (performed by Exide Corporation under SCDHEC Consent Order 96-12-HW), it is recommended that the site be referred to the SCDHEC Site Engineering Section for oversight of further remedial investigation/action. Future Federal Superfund investigations should consider aggregation of this site, Kings Acres Subdivision, the Exide Battery facility, and other surrounding residential areas into one site unless additional source areas are discovered.

VIII. REFERENCES

Copies attached unless noted

1. USGS Topographic Maps, 7.5 minute series
Taylors, SC 1983
Greer, SC 1983
2. SCDHEC Consent Agreement # 96-12-HW with Exide Corporation. April 9, 1996.
3. The Fletcher Group, Inc. Remedial Investigation Work Plan Westgate Trailer Park. June 1996. Portions attached.
4. Weston Technical Assistance Team. Memorandum to Warren Dixon concerning Removal at Westgate Trailer Site. October 25, 1994.
5. Mary Anderson, SCDHEC. Memorandum to File concerning sampling at Exide Corporation. March 4, 1992.
6. SCDHEC Bureau of Drinking Water Protection. Public Water Supply "B" List. December 19, 1990. Available in Site Assessment Section.
7. Weston Technical Assistance Team. Memorandum to Warren Dixon concerning sampling at Westgate Trailer Park. August 3, 1994.

PREScore 4.0
HRS DOCUMENTATION RECORD
Westgate Mobile Home - 12/31/96

1. Site Name: Westgate Mobile Home
(as entered in CERCLIS)
2. Site CERCLIS Number: SC0000487687
3. Site Reviewer: Jonathan McInnis
4. Date: 12/30/96
5. Site Location: Greer, Greenville County, SC
(City/County, State)
6. Congressional District:
7. Site Coordinates: Single

Latitude: 34°56'16.9"

Longitude: 082°15'27.0"

	Score
Ground Water Migration Pathway Score (Sgw)	0.00
Surface Water Migration Pathway Score (Ssw)	0.00
Soil Exposure Pathway Score (Ss)	21.60
Air Migration Pathway Score (Sa)	0.00

Site Score	10.80
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NOTE

Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

PREScore 4.0
WASTE QUANTITY
Westgate Mobile Home - 12/31/96

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Contaminated Soil

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

PREScore 4.0
WASTE QUANTITY
Westgate Mobile Home - 12/31/96

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Contaminated Soil		
b. Source Type	Contaminated Soil		
c. Secondary Source Type	N.A.		
d. Source Vol.(yd3/gal)	Source Area (ft2)	0.00	220000.00
e. Source Volume/Area Value	6.47E+00		
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00		
g. Data Complete?	NO		
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00		
i. Data Complete?	NO		
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	6.47E+00		

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Cadmium	< 2	NO	4.4E+02	ppm
Lead	< 2	NO	6.0E+02	ppm

PREScore 4.0
WASTE QUANTITY
Westgate Mobile Home - 12/31/96

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No. Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1 Contaminated Soil	GW-SW-SE-A	6.47E+00	0.00E+00	6.47E+00

PREScore 4.0
WASTE QUANTITY
Westgate Mobile Home - 12/31/96

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values	HWQVs*	WCVs**
Ground Water	Toxicity/Mobility 2.00E+01	10	3
SW: Overland Flow, DW	Tox./Persistence 1.00E+04	10	18
SW: Overland Flow, HFC	Tox./Persis./Bioacc. 5.00E+07	10	100
SW: Overland Flow, Env	Etox./Persis./Bioacc. 5.00E+06	10	56
SW: GW to SW, DW	Tox./Persistence 2.00E+01	10	3
SW: GW to SW, HFC	Tox./Persis./Bioacc. 1.00E+05	10	32
SW: GW to SW, Env	Etox./Persis./Bioacc. 1.00E+04	10	18
Soil Exposure: Resident	Toxicity 1.00E+04	10	18
Soil Exposure: Nearby	Toxicity 1.00E+04	10	18
Air	Toxicity/Mobility 2.00E-01	10	1

* Hazardous Waste Quantity Factor Values

** Waste Characteristics Factor Category Values

Note: SW = Surface Water
 GW = Ground Water
 DW = Drinking Water Threat
 HFC = Human Food Chain Threat
 Env = Environmental Threat

PREScore 4.0
WASTE QUANTITY
Westgate Mobile Home - 12/31/96

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer:		
1. Observed Release	550	0
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	0
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release (lines 2a(2b+2c+2d))	500	400
3. Likelihood of Release	550	400
Waste Characteristics		
4. Toxicity/Mobility	*	2.00E+01
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	3
Targets		
7. Nearest Well	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Wellhead Protection Area	20	0.00E+00
11. Targets (lines 7+8d+9+10)	**	0.00E+00
12. Targets (including overlaying aquifers)	**	0.00E+00
13. Aquifer Score	100	0.00
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
 Westgate Mobile Home - 12/31/96

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release by Overland Flow		
2a. Containment	10	10
2b. Runoff	25	0
2c. Distance to Surface Water	25	25
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	250
3. Potential to Release by Flood		
3a. Containment (Flood)	10	0
3b. Flood Frequency	50	0
3c. Potential to Release by Flood (lines 3a x 3b)	500	0
4. Potential to Release (lines 2d+3c)	500	250
5. Likelihood of Release	550	250
Waste Characteristics		
6. Toxicity/Persistence	*	1.00E+04
7. Hazardous Waste Quantity	*	10
8. Waste Characteristics	100	18
Targets		
9. Nearest Intake	50	0.00E+00
10. Population		
10a. Level I Concentrations	**	0.00E+00
10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources	5	0.00E+00
12. Targets (lines 9+10d+11)	**	0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
 Westgate Mobile Home - 12/31/96

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	250
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+07
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	1000	100
Targets		
18. Food Chain Individual	50	0.00E+00
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	0.00E+00
19d. Population (lines 19a+19b+19c)	**	0.00E+00
20. Targets (lines 18+19d)	**	0.00E+00
21. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
 Westgate Mobile Home - 12/31/96

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	250
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	5.00E+06
24. Hazardous Waste Quantity	*	10
25. Waste Characteristics	1000	56
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	0.00E+00
26d. Sensitive Environments (lines 26a+26b+26c)	**	0.00E+00
27. Targets (line 26d)	**	0.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.00
29. WATERSHED SCORE	100	0.00
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Westgate Mobile Home - 12/31/96

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release to Aquifer Aquifer:		
1. Observed Release	550	0
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	0
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	400
3. Likelihood of Release	550	400
Waste Characteristics		
4. Toxicity/Mobility/Persistence	*	2.00E+01
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	3
Targets		
7. Nearest Intake	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Targets (lines 7+8d+9)	**	0.00E+00
11. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Westgate Mobile Home - 12/31/96

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
12. Likelihood of Release (same as line 3)	550	400
Waste Characteristics		
13. Toxicity/Mobility/Persistence/Bioacc.	*	1.00E+05
14. Hazardous Waste Quantity	*	10
15. Waste Characteristics	1000	32
Targets		
16. Food Chain Individual	50	0.00E+00
17. Population		
17a. Level I Concentrations	**	0.00E+00
17b. Level II Concentrations	**	0.00E+00
17c. Pot. Human Food Chain Contamination	**	0.00E+00
17d. Population (lines 17a+17b+17c)	**	0.00E+00
18. Targets (lines 16+17d)	**	0.00E+00
19. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Westgate Mobile Home - 12/31/96

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
20. Likelihood of Release (same as line 3)	550	400
Waste Characteristics		
21. Ecosystem Tox./Mobility/Persist./Bioacc.	*	1.00E+04
22. Hazardous Waste Quantity	*	10
23. Waste Characteristics	1000	18
Targets		
24. Sensitive Environments		
24a. Level I Concentrations	**	0.00E+00
24b. Level II Concentrations	**	0.00E+00
24c. Potential Contamination	**	0.00E+00
24d. Sensitive Environments	**	0.00E+00
(lines 24a+24b+24c)		
25. Targets (line 24d)	**	0.00E+00
26. ENVIRONMENTAL THREAT SCORE	60	0.00
27. WATERSHED SCORE	100	0.00
28. SW: GW to SW COMPONENT SCORE (Sgs)	100	0.00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
SOIL EXPOSURE PATHWAY SCORESHEET
Westgate Mobile Home - 12/31/96

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	1.00E+04
3. Hazardous Waste Quantity	*	10
4. Waste Characteristics	100	18
Targets		
5. Resident Individual	50	4.50E+01
6. Resident Population		
6a. Level I Concentrations	**	0.00E+00
6b. Level II Concentrations	**	1.35E+02
6c. Resident Population (lines 6a+6b)	**	1.35E+02
7. Workers	15	0.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	1.80E+02
11. RESIDENT POPULATION THREAT SCORE	**	1.78E+06

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

*** No specific maximum value applies, see HRS for details.

PREScore 4.0
SOIL EXPOSURE PATHWAY SCORESHEET
Westgate Mobile Home - 12/31/96

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	7.50E+01
13. Area of Contamination	100	4.00E+01
14. Likelihood of Exposure	500	1.25E+02
Waste Characteristics		
15. Toxicity	*	1.00E+04
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	100	18
Targets		
18. Nearby Individual	1	0.00E+00
19. Population Within 1 Mile	**	0.00E+00
20. Targets (lines 18+19)	**	0.00E+00
21. NEARBY POPULATION THREAT SCORE	**	0.00E+00
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	21.60

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

PREScore 4.0
AIR PATHWAY SCORESHEET
Westgate Mobile Home - 12/31/96

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	0
2b. Particulate Potential to Release	500	220
2c. Potential to Release	500	220
3. Likelihood of Release	550	220
Waste Characteristics		
4. Toxicity/Mobility	*	2.00E-01
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	1
Targets		
7. Nearest Individual	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	0.00E+00
10c. Sens. Environments(lines 10a+10b)	***	0.00E+00
11. Targets (lines 7+8d+9+10c)	**	0.00E+00
AIR MIGRATION PATHWAY SCORE (Sa)	100	0.00E+00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

*** No specific maximum value applies, see HRS for details.

PREScore 4.0
AIR PATHWAY SCORESHEET
Westgate Mobile Home - 12/31/96

Record Information

1. Site Name: Westgate Mobile Home
(as entered in CERCLIS)
2. Site CERCLIS Number: SC0000487687
3. Site Reviewer: Jonathan McInnis
4. Date: 12/30/96
5. Site Location: Greer, Greenville County, SC
(City/County,State)
6. Congressional District:
7. Site Coordinates: Single
Latitude: 34°56'16.9" Longitude: 082°15'27.0"

Site Description

1. Setting: Urban
2. Current Owner: Private - Industrial
3. Current Site Status: Active
4. Years of Operation: Active Site , from and to dates:
5. How Initially Identified: State/Local Program
6. Entity Responsible for Waste Generation:
 - Manufacturing
 - Primary Metal Industries
 - Electronic Equipment
7. Site Activities/Waste Deposition:
 - Other -

Waste Description

8. Wastes Deposited or Detected Onsite:
 - Organic Chemicals
 - Inorganic Chemicals

PREScore 4.0
NPL Characteristics Data Collection Form
Westgate Mobile Home - 12/31/96

Response Actions

9. Response/Removal Actions:

- Emergency Waste Removal Has Occurred

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Not Applicable

Demographic Information

11. Workers Present Onsite: No

12. Distance to Nearest Non-Worker Individual: Onsite

13. Residential Population Within 1 Mile: Unknown

14. Residential Population Within 4 Miles: Unknown

Water Use Information

15. Local Drinking Water Supply Source:

- No Water Withdrawals Within Target Distance Limits

16. Total Population Served by Local Drinking Water Supply Source: Unknown

17. Drinking Water Supply System Type for Local Drinking
Water Supply Sources:

- Unknown

18. Surface Water Adjacent to/Draining Site:

- None

U . S . E P A R E G I O N I V

SDMS

Unscannable Material Target Sheet

DocID: 10079220 Site ID: SC0042633859

Site Name: EXIDE BATTERY CORP

Nature of Material:

Map: ✓

Computer Disks:

Photos:

CD-ROM:

Blueprints:

Oversized Report:

Slides:

Log Book:

Other (describe):

Amount of material: # 1

Please contact the appropriate Records Center to view the material.

THIS IS A TRUE COPY OF DEPARTMENT OF HEALTH
& ENVIRONMENTAL CONTROL RECORDS

Rebecca Shealy

THE STATE OF SOUTH CAROLINA

BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IN RE: EXIDE CORPORATION
SCD 042 633 859
GREENVILLE COUNTY

CONSENT ORDER
96-12-HW

General Battery Corporation, a wholly-owned subsidiary of Exide Corporation, owns a lead-acid battery manufacturing facility in Greer, South Carolina, which is leased and operated by Exide Corporation ("facility" or "site").

FINDINGS OF FACT

In the early 1960's, Bowers Battery (which later changed its name to General Battery and Ceramic Corporation and in 1968, to General Battery Corporation) began operation at the Greer facility. Exide Corporation began operation at the site in May of 1987.

An earthen lagoon was constructed at the facility in the early 1960's by Bowers Battery for the treatment of industrial wastewater. Subsequently the groundwater became contaminated with lead and sulfates. In 1977, General Battery Corporation constructed a neutralization system at the plant site for pretreatment of wastewater prior to discharge into the city sewer system. The lagoon was not used for the treatment of industrial wastewater after the completion of the pretreatment system and the lagoon was properly closed in 1982.

On June 8, 1984, the Department issued a permit for the construction of a groundwater recovery and treatment program for groundwater remediation. The recovery and treatment facility was constructed and remains in operation to date.

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

In April, 1986, the Department determined that the soil in the drainage areas at the back of the plant site was contaminated with lead. On July 8, 1986, Administrative Consent Order 86-36-SW between the Department and General Battery Corporation was executed which required the submittal of the site assessment plan for a comprehensive study of the facility to identify all areas of soil contamination. A site assessment was submitted by General Battery Corporation and approved by the Department to address contamination at the facility. During implementation of the approved plan, Exide Corporation removed approximately 1039 tons of contaminated soil, of which 854 tons were determined to be a characteristically hazardous waste for lead. The area where the soils were removed was limed at a rate of 2000 lbs/acre, graded and hydro-seeded. On August 24, 1990, Exide Corporation notified the Department that the soil remediation was complete.

On February 21, 1991, the Department received a citizen's complaint which was related to the removal of soil from the Exide plant site.

On February 22, 1991, Department personnel met with Exide representatives to discuss the citizen's complaint. Exide personnel told the Department that it was in the process of extending the raw materials container storage area at the site. The soil was excavated and stockpiled onsite, then regraded to allow for the proper fill material to be placed prior to the asphalt. It was determined that, on or about January 18, 1991, the unused, excavated soil was taken to Cochran Motors property, located at 1455 Wade Hampton Boulevard in Greenville County, where it was used as fill by the owner of the Cochran Motors' property. The Department and Exide collected split samples at the Cochran Motor's site. A composite sample was collected from various locations along the surface of the fill area. Exide's results, as analyzed and reported by an independent laboratory indicated a total lead concentration of 2100 ppm and a Toxicity Characteristic Leaching Procedure ("TCLP")

lead concentration of 73 ppm. Department results were 7500 ppm total lead. Based on Exide's results, the soil excavated from the Exide plant site and transported and disposed of offsite by Exide is considered a hazardous waste by characteristic.

On April 3, 1991, the Department issued a Notice of Violation to Exide citing violations and scheduling an enforcement conference for April 25, 1991, to discuss the cited violations. During the enforcement conference, Exide told the Department that on January 18, 1991, approximately 100 cubic yards of soil was removed from Exide's property and disposed of offsite by a contractor. (In an affidavit submitted by Exide on June 7, 1991, the contractor (T & G Construction) stated that it removed approximately 80 to 90 cubic yards from Exide's property).

On March 15, 1991, Exide initiated the removal of the contaminated soil from the Cochran Motors' fill site. The contaminated soil was transported by a permitted hazardous waste transporter to a permitted hazardous waste disposal facility.

On June 7, 1991, Exide submitted to the Department the "Final Report of Soil Clean-up/Remedial Activities" ("Report") to document the efforts which were undertaken by Exide to remove the soil from the Cochran Motors' property. A narrative was not included in the Report. The Department has determined the following based on information from the Report:

- 1) The Cochran Motors dump site is located on an area approximately 95 feet by 75 feet. A creek is located to the east of the dump site
- 2) Between March 15, 1991 and March 29, 1991, Exide excavated and removed four hundred two thousand, three hundred and eighty pounds (402,380 lbs.) of soil including lead contaminated soil with asphalt and gravel and delivered the material to a permitted hazardous waste disposal facility.

3) In order to verify the adequacy of Exide's removal activities, the Cochran Motors' fill site was divided into six areas for sampling. Also, two surface water samples were scheduled to be collected from the creek.

4) On April 5, 1991, composite soil samples were collected and analyzed by Exide's consultant from each sample area. TCLP lead levels from the six sampling points were 13 mg/l, 12 mg/l, 21 mg/l, 11 mg/l, <.31 mg/l and 5 mg/l. Also, on April 5, 1991, two surface water grab samples were collected from the creek. Based upon data submitted by Exide, Sample #3 (upstream) results were .06 mg/l lead while sample #8 (downstream) results were .04 mg/l lead.

5) Following receipt of laboratory data for soil samples collected on April 5, 1991, Exide completed the excavation and disposal of additional soil from the Cochran Motors' site. On April 22, 1991, grab soil samples were collected (with the exception of sample area #6 from which no additional soil was removed) to verify the adequacy of the second removal. TCLP lead levels from five sample points were reported as 10 mg/l, .2 mg/l, .5 mg/l, .14 mg/l, and .04 mg/l. Following receipt of the data, Exide initiated additional removal of soil a sample area #1.

6) Between April 22, 1991 and May 22, 1991, one hundred sixteen thousand, five hundred and sixty pounds (116,560 lbs.) of soil including lead contaminated soil with asphalt and gravel was excavated from the Cochran Motors' site by Exide. During the entire removal process, Exide excavated five hundred eighteen thousand, nine hundred and forty pounds (518,940 lbs.) of soil including lead contaminated soil with asphalt and gravel and delivered the material to the hazardous waste disposal facility.

7) On May 23, 1991, a soil grab sample was collected from sample area #1. Exide's results indicated a total lead concentration of 190 mg/kg and a TCLP lead concentration of 2.3 mg/L.

On August 1, 1991, Exide submitted to the Department a narrative explaining the sampling and remediation activities at the Cochran Motors' site. The narrative included number and locations of soil composite samples and a review of reasons for the collection and analysis of soil samples during the second and third sampling rounds.

On August 16, 1991, the Department issued a letter to Exide requesting that arrangements be initiated with the Department to conduct additional sampling at the Cochran Motors' site to determine background conditions.

On November 4, 1991, the Department received the results from additional sampling conducted by Exide at the Cochran Motors' site and determined that restoration of the site should commence as soon as possible.

CONCLUSIONS OF LAW

Exide has violated the South Carolina Hazardous Waste Management Regulations, 25 S.C. Code Regs. 61-79 (Law Co-op. 1976 & Supp. 1994), promulgated pursuant to the South Carolina Hazardous Waste Management Regulations, South Carolina Code Ann. Sections 44-56-10 ~~et seq.~~ (Law Co-op. 1976 & Supp. 1994). Exide has violated the following:

- 1) R.61-79.262.11, for failure to make a hazardous waste determination;
- 2) R.61-79.262.12(c), for offering hazardous waste to a transporter or disposal facility that has not received an EPA Identification Number and a Department permit;
- 3) R.61-79.262.20(a), for not preparing a manifest before offering hazardous waste for transportation offsite;
- 4) R.61-79.262 Subpart C, Pre-Transport Requirements, for failure to properly ~~package~~, label, mark and placard hazardous waste before offering the hazardous waste for transportation

offsite;

5) R.61-79.270.1(b), for disposing of a hazardous waste without first applying for and receiving a Department permit for that activity.

Also, Exide has violated the Pollution Control Act, South Carolina Code Ann. Sections 48-1-10 et seq. (Law Co-op 1976 & Supp. 1994) in that it is unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department.

NOW THEREFORE IT IS ORDERED with the consent of Exide and pursuant to Sections 48-1-50, 44-56-130, and 44-56-140 of said Code, as amended, that Exide agrees to the following:

- 1) Ensure future compliance with the South Carolina Hazardous Waste Management Regulations;
- 2) Ensure future compliance with the Pollution Control Act;
- 3) Within thirty (30) days of the effective date of this order, provide to the Department for approval documentation that the Cochran Motors' site has been properly remediated and restored;
- 4) Within thirty (30) days of the effective date of this order, submit, to the Department for approval, a Site Assessment Work Plan ("SAWP") for the entire Exide facility, to identify areas of soil lead contamination and potential soil lead contamination at the site. The SAWP shall address all areas where spillage and runoff might have occurred, or could occur, causing an adverse impact to the environment, including vegetated areas and covered areas including, but not limited to, asphalt and concrete parking areas. The SAWP shall evaluate the vertical and horizontal extent of lead contamination and potential lead contamination. The SAWP shall also include a schedule for all

major work activities under the SAWP. Within thirty (30) days of notification of approval of the SAWP by the Department, Exide will initiate the soil sampling in accordance with the approved plan and schedule.

5) Within forty-five (45) days of completion of the work required under the SAWP, Exide shall submit a written report to the Department outlining all sample results. This report shall also include, for Department approval, a Remediation Plan for the proper remediation of any soil or groundwater contamination consistent with continued use of the facility and land use in the area. Remediation in accordance with the Department approved Remediation Plan shall begin within thirty (30) days of Department approval of said plan. A final report shall be submitted to the Department, within thirty (30) days of completing remediation, to document remedial activities.

6) Within thirty (30) days of Department approval of the written report submitted after completion of the Focused Investigation/Study Work Plan for the Kings Acres Subdivision as described in Consent Agreement 95-30-HW, submit to the Department a remediation plan to address removal and proper disposal of all soils with a total lead level value as deemed necessary by the Department.

7) Within sixty (60) days of the effective date of this order, submit to the Department a Remedial Investigation Work Plan ("RI") to investigate lead contamination in the Westgate Trailer Park. The RI shall include, but not be limited to, investigation of the source(s), adequate delineation of all potential areas of contamination, evaluation of remedial alternatives and a Risk Assessment for Westgate Trailer Park as deemed necessary by the Department.

8) If the Department determines that remediation of the Westgate Trailer Park is necessary, Exide shall submit a Remediation Plan for Westgate Trailer Park to address removal and

proper disposal of all contaminated soils as deemed necessary by the Department. This Remediation Plan shall include an approvable schedule for all major work activities described in the Remediation Plan.

9) All plans submitted to the Department for approval shall be consistent with the technical intent of the National Contingency Plan. All Occupational Safety and Health Act (OSHA) regulations and protocols shall be followed.

10) If any event occurs which causes or may cause a delay in meeting any of the above-scheduled dates for completion of any specified activity pursuant to the approved Work Plan, Exide shall notify the Department in writing at least five (5) days before the scheduled date. Exide shall describe in detail the anticipated length of the delay, the precise cause or causes of delay, if ascertainable, the measures taken or to be taken to prevent or minimize the delay, and the timetable by which Exide proposes that those measures will be implemented. The Department shall provide written notice to Exide as soon as practicable that a specific extension of time has been granted or that no extension has been granted. An extension shall be granted for any scheduled activity delayed by an event of force majeure which shall mean any event arising from causes beyond the control of Exide that causes a delay in or prevents the performance of any of the conditions under this Consent Order including, but not limited to: a) acts of God, fire, war, insurrection, civil disturbance, explosion; b) adverse weather conditions that could not be reasonably anticipated causing unusual delay in transportation and/or field work activities; c) restraint by court order or order of public authority; d) inability to obtain, after exercise of reasonable diligence and timely submittal of all applicable applications, any necessary authorizations, approvals, permits, or licenses due to action or inaction of any governmental agency or authority; and e) delays caused by compliance with

applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence by Exide. Events which are not force majeure include by example, but are not limited to, unanticipated or increased costs of performance, changed economic circumstances, normal precipitation events, or failure by Exide to exercise due diligence in obtaining governmental permits or performing any other requirement of this Order or any procedure necessary to provide performance pursuant to the provisions of this Order. Any extension shall be granted at the sole discretion of the Department, incorporated by reference as an enforceable part of this Consent Order, and, thereafter, be referred to as an attachment to the Consent Order.

11) The Department agrees that access to property owned by Exide will be restricted to representatives of Exide, its consultants, contractors and invited guests except as modified herein. Employees of the Department and the EPA and their respective consultants and contractors will not be denied access during normal business hours or at any time work under the approved Work Plan is being performed or during any environmental emergency or imminent threat situation, as determined by the Department (or as permitted by applicable law). Exide shall make reasonable efforts (which shall include but not be limited to written requests to the property owners requesting access, describing the activity for which access is requested, and a commitment to return the property to the condition it was in prior to the activity for which Exide sought access) to gain access to any property not owned by Exide but affected by the work in this Consent Order. The Department shall not be a party to any contract, lease, or other agreement between Exide and the property owner. The Department shall determine in its discretion whether Exide has made good faith efforts to obtain access to any property necessary to comply with this Order.

12) With regards to third party actions, Exide does not admit, accept or concede the

Findings of Fact or Conclusions of Law set forth in this Consent Order and specifically reserves the right to contest any such Findings of Fact or Conclusions of Law in any third party action regarding the Site. The Consent Order shall be admissible in any enforcement action brought by the Department but may not be utilized by third parties against Exide as proof of any allegations, findings or conclusions contained herein.

13) Exide specifically denies any responsibility for response costs or damages, and does not, by signing this Consent Order, waive any rights which it may have to assert any claims in law or equity against any other person, company or entity with respect to the Site.

IT IS FURTHER ORDERED AND AGREED that failure to comply with the requirements of this Order shall be deemed a violation of the South Carolina Hazardous Waste Management Act and the South Carolina Pollution Control Act and therefore shall be deemed unlawful. Upon ascertaining any such violation, the Department may promptly initiate appropriate action to obtain compliance with both this Order and the aforesaid Acts including but not limited to the assessment of a civil penalty of up to the statutory limit of twenty-five thousand dollars (\$25,000.00) per day per violation for the violations cited herein.

THE SOUTH CAROLINA DEPARTMENT OF
HEALTH AND ENVIRONMENTAL CONTROL

DATE: 4/9/96

BY: Douglas E Bryant
Douglas E Bryant, Commissioner

WE CONSENT:

EXIDE CORPORATION

John P. Barone

DATE: April 3, 1996



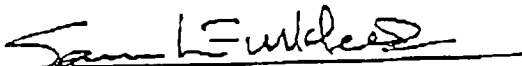
DATE: April 3/1996

THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



DATE: 4/9/96

Hartsill W. Truesdale, P.E., Chief
Bureau of Solid and Hazardous
Waste Management



DATE: 4/9/96

Approved by: Legal Office

**REMEDIAL INVESTIGATION WORK PLAN
WESTGATE TRAILER PARK**

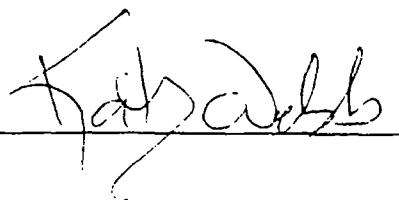
GREER, SOUTH CAROLINA

Prepared for
EXIDE CORPORATION

Greer, South Carolina

Prepared by
THE FLETCHER GROUP, INC.

June 1996



Kathryn W. Webb, PG
Project Hydrogeologist



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Appendix D	Health and Safety Plan
Appendix E	Quality Assurance/Quality Control Plan

1.0 Executive Summary

The following Remedial Investigation Work Plan (RIWP) has been prepared to investigate areas of potential lead impacted soil in the Westgate Trailer Park on Old Chick Springs Road in Greer, South Carolina. This work plan is required by the South Carolina Department of Health and Environmental Control (SC DHEC) Consent Agreement 96-12-HW (the "CA") (Appendix A).

The Westgate Trailer Park is located at the intersection of Old Buncombe Road and Old Chick Springs Road in Greer, South Carolina (Figure 1). The trailer park consists of approximately 52 mobile homes located on a 5 acre tract. The trailer park was determined by the US EPA in 1994 to be at least 25 years old and is suspected to have been a former peach orchard. According to available aerial photographs, the trailer park was partially established in 1968 and expanded to its current size by 1970 (Appendix B). An Exide Battery facility is located adjacent to the southwest side of the trailer park. The Exide facility has been used for the manufacture of lead acid batteries since the early 1960's.

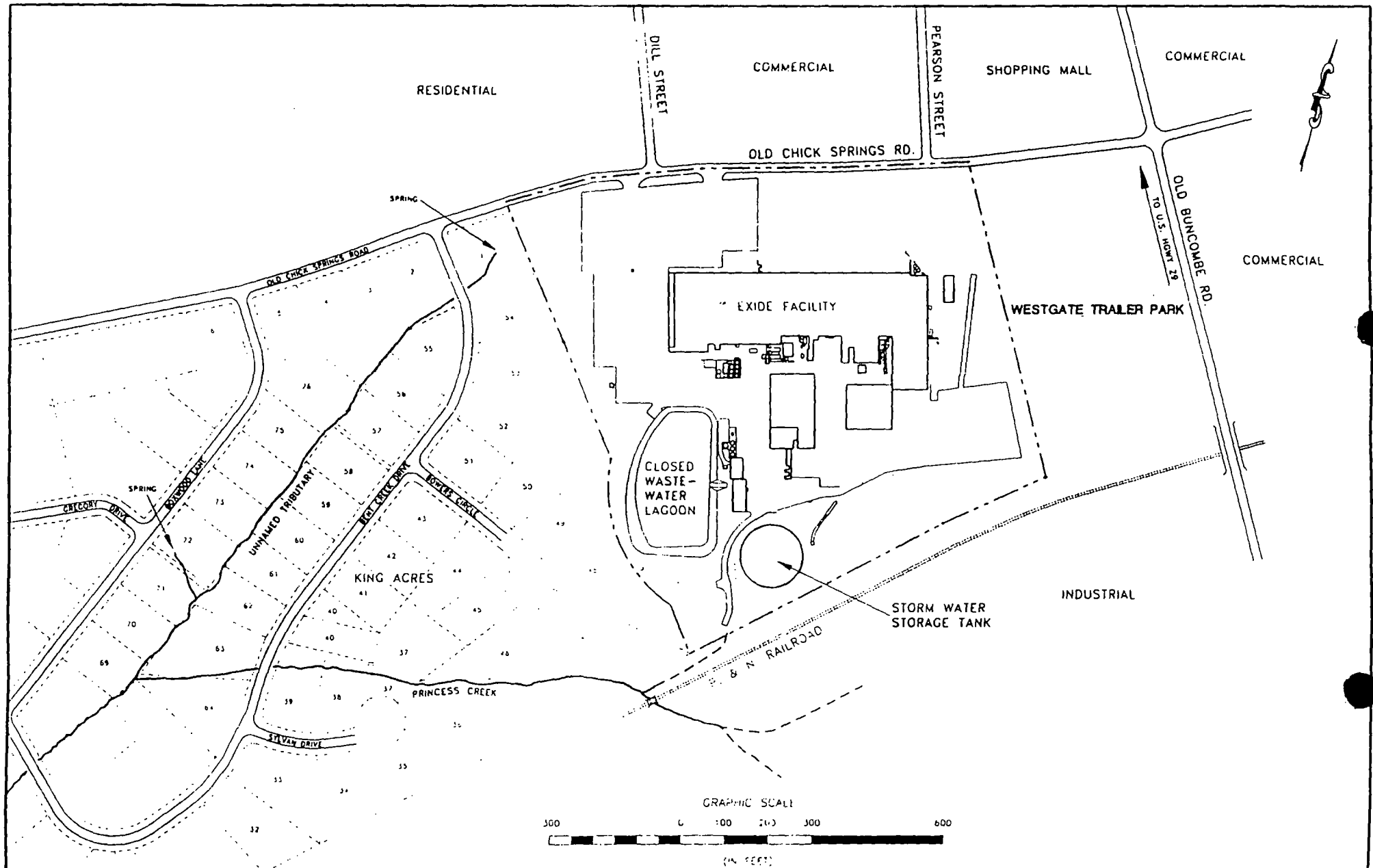
Since 1992, the SC DHEC has conducted a number of lead investigations in the Westgate Trailer Park. In June 1994, under contract with the United States Environmental Protection Agency (US EPA), Roy F. Weston Inc. collected fifty (50) shallow soil samples (0-3 inches) for total lead analysis across the grassed areas of the trailer park. Six (6) of the shallow soil samples contained total lead concentrations greater than 500 ppm. As a follow-up to the soil sampling, the US EPA had the shallow soil from the six (6) identified areas excavated in September 1994 (verbal communication with Warren Dixon, EPA). Reportedly a grid of approximately 10 to 15 feet around each location was removed. According to Mr. Dixon, no sampling of the soil remaining in the trailer park has been conducted since September 1994.

The following RI work plan has been designed to investigate the potential lead impacted soil remaining in the Westgate Trailer Park following the removal action. The proposed investigation will build on the previous investigation by the US EPA to assess the lead concentration in the surface soil throughout the trailer park. In addition, an assessment of potential source pathways of the lead concentrations will be conducted.

The RI investigation will include the sampling and analysis of thirty five (35) surface soil samples for total lead analysis within the Westgate Trailer Park. The surface soil samples will be collected from a depth of 0 to 3 inches. In summary, including four (4) duplicate samples, a total of thirty nine (39) additional soil samples will be collected and analyzed for total lead during the remedial investigation.

Analysis of available air monitoring and surface water run off data will be reviewed in an attempt to identify pathways for lead deposition within the Westgate Trailer Park.

Following receipt of the verified analysis of all the surface samples, a summary report will be submitted to SC DHEC. Upon review of the remedial investigation data with SC DHEC it may be appropriate to conduct a follow-up investigation of potential source(s), further delineation of potential areas of contamination, an evaluation of remedial alternatives and/or a Risk Assessment for the Westgate Trailer Park.



THE FLETCHER GROUP

Greenville, South Carolina

DRAWN BY JEC	DATE 05-22-96
CHECKED BY KWW	PROJECT NO. 265.06
APPROVED BY KWW	DRAWING NUMBER 265.06\26506WG

FIGURE 1
MAP OF THE AREA SURROUNDING THE
WESTGATE TRAILER PARK
GREER, SOUTH CAROLINA

2.0 Previous Investigations and Removal Actions

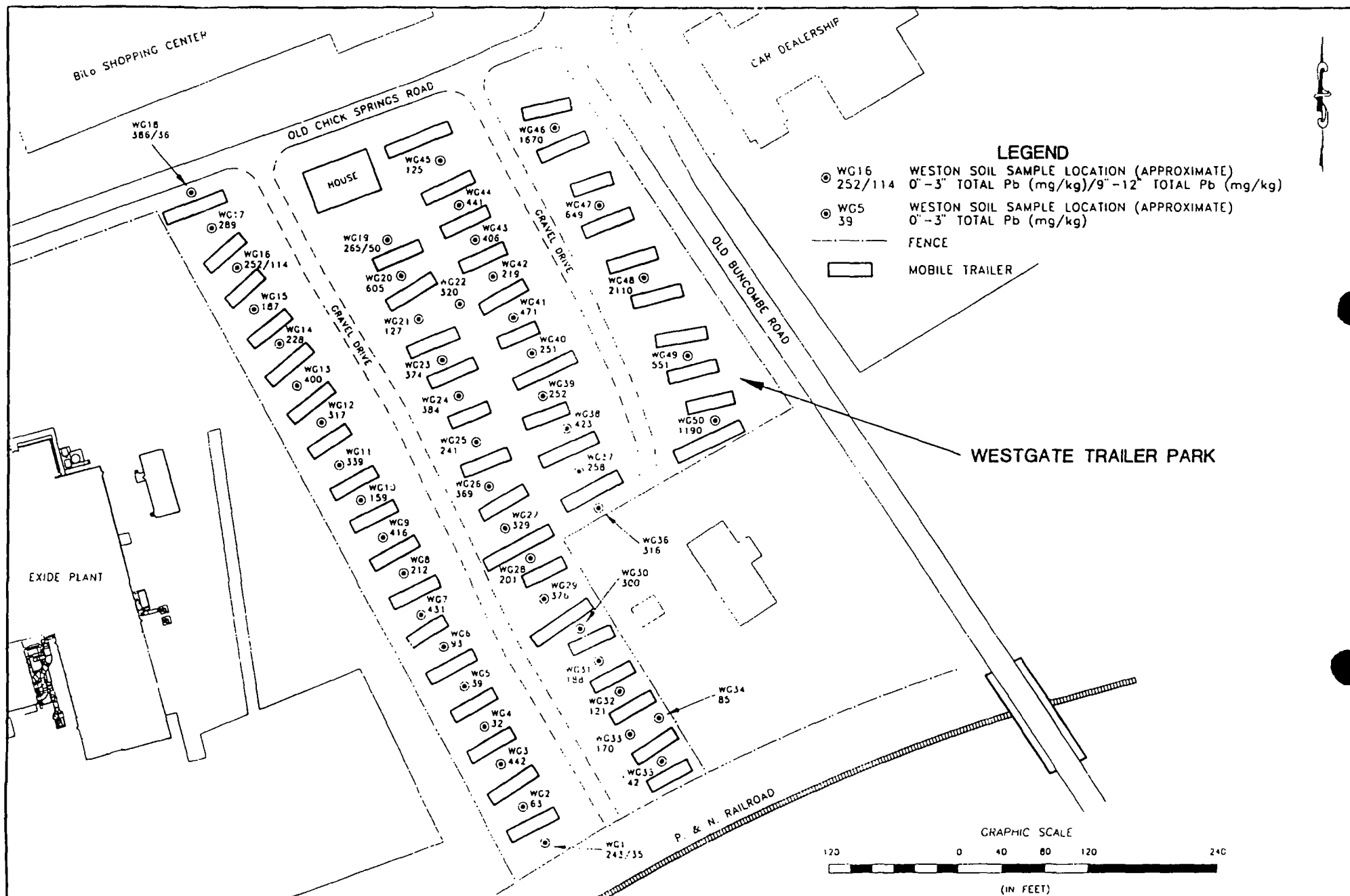
In January 1992, SC DHEC collected surface soil samples from three (3) locations in the Westgate Trailer Park. The total lead concentrations ranged from 270 ppm to 800 ppm. The sampling was repeated in March 1992, with total lead and TCLP lead analyzed on the three (3) samples. The total lead concentrations were similar to the January results (total lead concentrations ranged from 340 to 780 ppm). The TCLP lead results were all less than 1 mg/l and, therefore, SC DHEC determined that the soil did not present an environmental problem (SC DHEC memo from Harold Seabrook to M. Anderson, dated May 28, 1992). The SC DHEC correspondence, laboratory reports and sampling map are included in Appendix C.

In June 1994, the US EPA, using Roy F. Weston as a contractor, and the SC DHEC conducted a follow-up soil sampling event. Fifty (50) soil sample locations were chosen as shown on Figure 2. A surface soil sample was collected from a depth of 0 to 3 inches in most of the yards within the trailer park. At four (4) of the sample locations, a subsurface soil sample was collected from a depth of 9 to 12 inches. The total lead concentrations detected in the samples are posted on Figure 2. The table of lead results and a sample location map from the Weston report are included in Appendix C. Six (6) of the shallow soil samples exceeded a total lead concentration of 500 ppm. The subsurface soil samples had total lead concentrations of 114 ppm or less.

In September 1994, the US EPA conducted a removal action in the six (6) areas with lead concentrations greater than 500 ppm. The 500 ppm criteria was based upon the cleanup goal for the nearby Elmore Waste Disposal Site, located approximately 2 miles from the trailer park. According to the soil removal work plan, a grid of approximately 10 to 15 feet around each of the six (6) sample locations was excavated. Clean soil was to have been backfilled into the excavations. The US EPA has not prepared a follow up report documenting the activities conducted during the removal action.

SC DHEC also conducted a short term air monitoring program in the Westgate Trailer Park from December 1994 through May 1995. An air monitoring station was set up in the trailer park and was monitored by SC DHEC as a comparison to an air monitoring station located on Exide's property, near the trailer park. The results indicated a good correlation between the data recorded at the Exide air monitoring station and the station in the trailer park. The air-borne lead detected in the trailer park was also consistently less than that recorded at the Exide station (SC DHEC memorandum dated March 22, 1995, Appendix C).

To date, no source for the elevated lead in the trailer park surface soil has been identified by US EPA or SC DHEC.



DRAWN BY JOHN C. DATE 05-22-96
 CHECKED BY KWW PROJECT NO EXIDE 265
 APPROVED BY KWW DRAWING NUMBER 265.06\265.06WG2

FIGURE 2
 WESTGATE TRAILER PARK
 WESTON SOIL SAMPLE LOCATION MAP-JUNE 29, 1994
 GREER, SOUTH CAROLINA

3.0 Proposed Investigation Activities

The Remedial Investigation soil assessment activities will be conducted following the written approval from SC DHEC of this work plan and authorization from the trailer park property owner. The soil sampling will be performed by experienced sampling personnel familiar with the protocol described in this work plan, including the Health and Safety plan (provided in Appendix D). New, disposable sampling equipment will be used where possible to avoid the possibility of cross-contamination between locations. All the sampling activities will be documented in a bound field notebook, in waterproof ink, with the pages dated and initialed by the sampler(s). The sample locations will be measured from permanent structures for location on a scaled map. Where possible, the locations will also be staked or marked with surveyors paint for future reference.

The Westgate Trailer Park is privately owned property with tenants renting the trailers and/or trailer lots. Exide, or its contractor, will send a written request to the property owner, via certified mail, requesting access for the soil sampling proposed on the property. The letter will include a description of the planned activities and a commitment to return the property to the condition it was in prior to the sampling. The property owner will be requested to sign the access agreement and to return the signed copy to Exide, or to its contractor, within 2 weeks of receipt of the letter. A stamped envelope addressed to Exide, or its contractor, will be included in the mailing to encourage a response.

If the property owner does not respond within the 2 week period, he will be called and encouraged to allow the proposed sampling. If Exide, or its contractor, is unable to reach the property owner on the telephone, or is unable to reach an access agreement over the telephone, an Exide representative will attempt to visit the individual in-person to obtain the access agreement. If all of the above efforts to gain access fail, Exide, or its contractor, will have an affidavit prepared documenting that access was denied.

Following the receipt of the written access agreement, the soil sampling will be scheduled. The owner of the trailer park also be asked to provide the names and the telephone numbers of the current trailer park tenants so they can be notified of the proposed soil sampling by Exide.

The soil sampling will involve collecting surface soil samples for total lead analysis at thirty five (35) sample locations around the trailer park. The trailer park sample locations have been chosen to assess the surface soil conditions around the six (6) former soil removal areas and as well as the general surface soil conditions around other areas of the trailer park. Samples within and surrounding the former soil removal areas are proposed. The remainder of the sample locations have been chosen where previous lead concentrations were greater than 400 ppm.

All the soil samples will be collected from a depth of 0 to 3 inches below the ground surface. All the soil samples will be submitted for total lead analysis.

New, disposable stainless steel spoons and decontaminated stainless steel hand augers will be used for sample collection. The samples will be blended in the field using new, disposable aluminum pans, and jarred. The stainless steel hand auger bucket will be completely decontaminated prior to each use. The

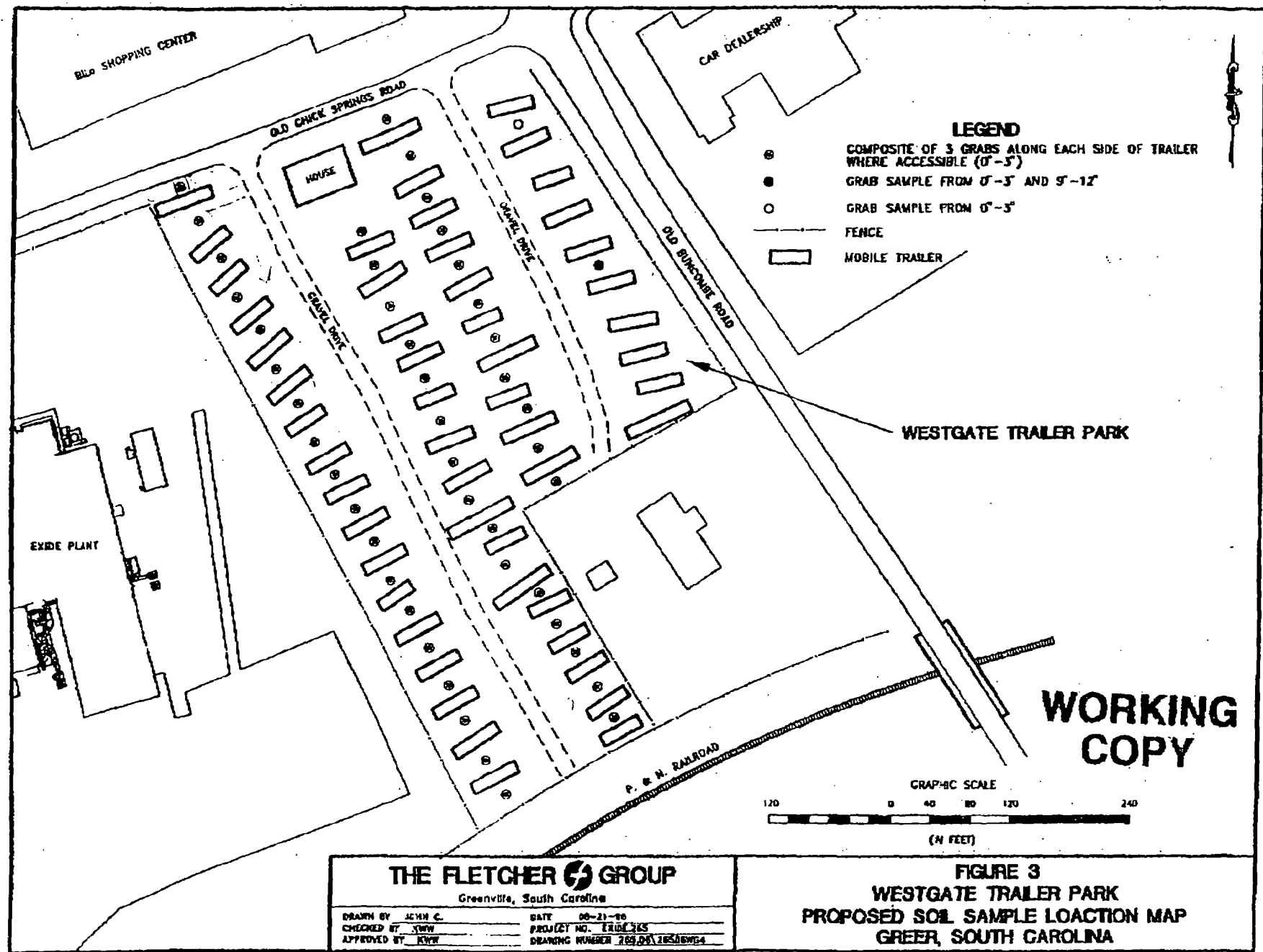
New, disposable stainless steel spoons and decontaminated stainless steel hand augers will be used for sample collection. The samples will be blended in the field using new, disposable aluminum pans, and jarred. The stainless steel hand auger bucket will be completely decontaminated prior to each use. The decontamination procedures are described in Appendix E. All the sampling activities will be logged in the field book and proper chain of custody will follow the samples from the time of sample collection through the process of laboratory analysis and reporting. The disposable sampling equipment will be bagged and properly disposed with similar Exide plant wastes. Any decontamination fluids generated will be containerized and disposed via the Exide wastewater treatment facility.

A summary of the sample container type, analytical method and holding time to be used for the investigation is provided as Table 1. The samples will be submitted to a laboratory certified in the State of South Carolina for analyses. Additional details concerning the quality assurance/quality control (QA/QC) procedures to be used on the project, including the definitions of and the number of QA/QC samples are included in Appendix E. As a quality control measure, four (4) duplicate soil samples will be submitted to the laboratory. One of the duplicates will be identified as such to the laboratory and the others will be given a fictitious sample identification numbers and will be submitted to the laboratory as a blind duplicates. In addition, one equipment rinsate blank per field sampling day will be collected for total lead analysis.

Table 1. Summary of Sample Containers, Holding Times and Analytical Procedures				
Parameter	Analytical Method	Sample Volume and Container	Preservative	Maximum Holding Time
Total Lead	SW-846 7420 or SW-846 6010	100 grams in plastic or glass container	Cool, 4° C	6 Months

Exide will submit to SC DHEC a written report describing the investigation activities and the results, within forty-five (45) days after receipt of the validated analytical soil sample data. The report will include summary tables of the sample data, laboratory reports and chain of custody form(s), and map(s) of the actual sample locations with the posted lead concentrations. The summary report will address potential source(s) of the elevated lead, if detected and delineation of areas of contamination, if detected. The summary report may also include an evaluation of remedial alternatives and propose a Risk Assessment if the current lead concentrations appear to warrant such activities.

Exide operates four (4) ambient air monitors to sample lead-in-air concentrations in the vicinity of its facility located adjacent to the Westgate Trailer Park. One of these monitors is located on Exide property near the trailer park. Data recorded at the Exide air monitoring station will be analyzed in attempt to determine if air emissions from the facility may have contributed to the lead concentrations remaining in the trailer park. Information on surface water runoff patterns is also available from past studies and implementation of an extensive surface water collection system at the Exide facility. This information will also be analyzed in attempt to determine if surface water runoff may have been a contributor.



4.0 Implementation Schedule

The following is the proposed Remedial Investigation implementation schedule. The dates will be based upon the SC DHEC written approval of the work plan.

Table 2. Remedial Investigation Implementation Schedule	
Task No. and Description	Proposed Schedule
No. 1 Obtain permission from the trailer park property owner to conduct the soil sampling	Request access within 30 days for SC DHEC Approval of the work plan
No. 2 Conduct Surface and Subsurface Soil Sampling and Submit the Soil Samples for Analysis	Initiate Within 30 days of Obtaining Approval from the Property Owner
No. 3 Submit Summary Report to SC DHEC	Within 45 working days of Receipt of Verified Soil Data



Building 300, Suite 325
1575 Northside Drive, N.W., Atlanta, Georgia 30318-4208
404-352-4147 • Fax 404-352-0659

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036

MEMORANDUM

TO: Warren Dixon, OSC
EPA, Region IV

FROM: Ronald Starks
TAT, Region IV

THRU: W. Scott Butterfield *WJB*
TATL, Region IV

SUBJECT: Westgate Trailer Site Removal
Greer, Spartanburg County, South Carolina
TDD# 04-9408-0016-5087
TAT# 04-F-01413

DATE: 25 October 1994

SITUATION

This report has been prepared in accordance with the requirements of Technical Direction Document (TDD) #04-9408-0016, assigned to the Roy F. Weston, Incorporated Technical Assistance Team (TAT), by the U.S. Environmental Protection Agency (EPA).

The overall scope of this TDD was to monitor the removal of soil from designated areas of the Westgate Mobile Home Park that had lead concentrations greater than 500 ppm. The trailer park was located behind Highway 29, at the intersection of Old Chick Springs Road and Buncombe Avenue and consists of 50 mobile homes (See Figure 1, Site Location Map). Westgate trailer park is bordered by Exide Battery facility, which is approximately 180 feet to the west. The Exide facility is contracted by numerous companies to make batteries. They have four air monitoring stations around the plant and each quarter of the year Exide sends the results to the South Carolina Department of Health and Environmental Control (DHEC). The emissions have been within regulatory limits and investigations to pinpoint the source of the lead contamination at the trailer park have been inconclusive to this point. During the site investigation the Technical Assistance Team (TAT) collected a total of fifty-five samples from the Westgate Trailer Park and at the Bent Creek Road residence.

Roy F. Weston, Inc.

MAJOR PROGRAMS DIVISION

In Association with Foster Wheeler USA Corporation, Resource Applications, Inc., C.C. Johnson & Malhotra, P.C.,

The soil samples were submitted to ETC, Gulf South Laboratory for total lead analysis. According to the analytical results received, six areas were above the level of 500 parts per million (ppm), and were designated by the OSC to have the soil excavated to a depth of 18" to eliminate the threat of lead poisoning to the residents of the mobile community. The Technical Assistance Team (TAT) was tasked by the Region IV On-Scene Coordinator (OSC), to provide site documentation (See Attachment D, Site Safety Plan) and oversight of the ERCS contractor, during the removal operation. Additionally TAT took Photodocumentation of site activities (See Attachment A, Photos) and daily log notes (See Attachment B, Log Notes), along with a list of official participants on the site (See Attachment C, Table of Witnesses).

SUMMARY

On 8 September 1994, TAT member Starks mobilized to the Westgate Trailer park site and met OSC Warren Dixon and the Emergency Removal Contractors Response Manager who were already on-site. The South Carolina Department of Utilities and Electric were on site locating underground power and sewer lines. The locations of underground lines were marked with spray paint. The main area of excavation would be in the row of trailers numbered 1 thru 10, and between trailers 22 and 23 (See Figure 2, Site Diagram for the exact location). The contaminated soil in the areas between the trailers and up to the access drive was excavated to a depth of 18", removed and sent to Palmetto Landfill and Recycling Center, 251 New Hope Road, Wellford, SC 29385. In the area between trailers 22 and 23 a tree was removed because its surface root system interfered with the excavation. The owner of the trailer park approved of its removal.

The purpose of this removal was to eliminate the threat of lead poisoning to residents of the trailer park. A total of 1200 tons of contaminated soil were sent to Palmetto Landfill and Recycling center (See Attachment E, Manifests). A total of 50 truck loads of cleanfill was received from Grady Minority Business enterprise. A sample of the clean soil was sent to James H. Carr & Associates, Inc. Environmental Services for analysis. The results indicated 8.36 mg/kg of lead which met the regulatory limits for pollutants (See Attachment F). The area of the soil excavation was restored to resemble its original landscape.

CONCLUSION

This completes the removal action, no further site activities are planned.

ATTACHMENTS

Figures 1-2 Maps & Sketches

Attachment A - Photographs

B - Log Notes

C - Table of Witnesses

D - Site Safety Plan

E - Waste Manifest

F - Lab Analysis

MEMORANDUM

DATE: March 4, 1992

TO: File
Exide Corporation
Greenville County

FROM: Mary Anderson *MA*
Appalachia II EQC

RE: Soil Sampling
Westgate Mobile Home Park

RECEIVED

APR 12 1992

S.C. Dept. of Health & Environmental
Control-Bureau of Solid & Hazardous
Waste Management

On March 3, 1992, the writer collected soil samples from the Westgate Mobile Home Park adjacent to the Exide Corporation. Three samples were collected for TCLP metals in response to results of total metals samples collected on January 28, 1992. Results of the earlier samples indicated lead levels of 270 ppm, 560 ppm, and 800 ppm at Stations 1, 2, and 3 respectively (see attached sketch). The samples submitted for TCLP analysis were collected at the same depth (1 to 3 inches) and adjacent to the previous sample locations.

cc: Doug Blansit, Health Hazard Evaluation
Harold Seabrook, BSHWM



Building 300, Suite 325
1575 Northside Drive, N.W., Atlanta, Georgia 30318-4208
404-352-4147 • Fax 404-352-0659

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036
MEMORANDUM

TO: Warren Dixon, OSC
EPA, Region IV

FROM: Ann Roat
TAT, Region IV

THRU: William R. Doyle
TATL, Region IV

SUBJECT: ~~Exide Battery Site Investigation~~
Greer, Greenville County, South Carolina
TDD #04-9406-0017-4989
0017A-5046
TAT #04-F-01347

DATE: 03 August 1994

SITUATION

This report has been prepared in accordance with the requirements of Technical Direction Document (TDD) #04-9406-0017, assigned to the Roy F. Weston, Incorporated Technical Assistance Team (TAT), by the U.S. Environmental Protection Agency (EPA).

The overall scope of this TDD was to sample areas of the Westgate Mobile Home Park and other residential areas in close proximity to the Exide Battery facility. This trailer park is located behind Highway 29, off of Old Chick Springs Road and consists of 50 mobile homes. The Exide Battery facility, which is approximately 180 feet to the west of the trailer park, is contracted by numerous different companies to make batteries. They have four air monitoring stations around the plant and each quarter of the year Exide sends the results to the South Carolina Department of Health and Environmental Control (DHEC). The results of air monitoring have not been above the DHEC legal limits so far although, the facility has noted groundwater contamination. According to a map acquired from DHEC, there are 24 monitoring wells for continuous use, 16 capped wells, 9 recovery wells, and 6 surface water monitoring stations to monitor this situation. This Exide plant may also have illegally dumped contaminated soil sometime between 1987-1989 and the Federal Bureau of Investigation (FBI) may be involved in an investigation of this allegation.

Roy F. Weston, Inc.

MAJOR PROGRAMS DIVISION

In Association with Foster Wheeler USA Corporation, Resource Applications, Inc., C.C. Johnson & Malhotra, P.C.
R.E. Sarriera Associates, and GRB Environmental Services, Inc.

correction
Westgate Mobile Home Park Site
Warren Dixon 8/31/94

It was felt the Westgate Trailer Park may possibly have been contaminated by fugitive emissions of lead dust from baghouses in areas where solid lead is melted down in Exide's manufacturing process. This lead dust is thought to have been released into the atmosphere where the particles eventually settled into the trailer park and in surrounding areas. The Technical Assistance Team (TAT) was tasked by the Region IV On-Scene Coordinator (OSC) Warren Dixon, to perform a site investigation for this area which included site documentation, soil sampling, and appropriate diagrams.

SUMMARY

On 28 June 1994, TAT members Roat, Hill, and Ryland mobilized to the Exide Battery site in Greenville County, South Carolina to meet OSC Warren Dixon and the Department of Health and Environmental Control (DHEC) Mike Klender and Carol Minsk. The purpose of this investigation was to document site conditions and obtain samples at the Westgate Mobile Home Park which is a residential area that is in close proximity to commercial areas. Upon arrival onsite, the TAT met with OSC Dixon and DHEC's as Klender and Minsk to survey the area and decide where the samples would be taken. After a perimeter reconnaissance, the OSC, and DHEC representatives went with the TAT to meet with Bobby Byars, a resident who had called and was concerned about the property at 103 Bent Creek Road. This property and three other yards on Bent Creek Road west of the Exide facility were sampled by a contractor representing Exide Battery in 1986 and Mr. Byars had requested that his yard be resampled at this time.

A total of fifty-five samples were taken from the Westgate Trailer Park and at the Bent Creek Road residence. The OSC tasked the TAT to take grab samples; the areas sampled consisted of two grab samples each, one taken at 0-3 inches and one taken at 9-12 inches. Upon successful completion of sampling and all other required tasks, all TAT personnel demobilized from the site and returned to the TAT office the following day.

CONCLUSION

The Westgate Mobile Trailer Park adjacent to the Exide Battery facility was assessed and samples were obtained from the areas of concern. These soil samples were submitted to ETC, Gulf South Laboratory, a TAT contracted laboratory, for total lead analysis. According to the analytical results received, six areas were above the level of 500 parts per million (ppm) as seen in the table below:

WG-20	WG-46	WG-47	WG-48	WG-49	WG-50
605 ppm	1670 ppm	649 ppm	2110 ppm	551 ppm	1190 ppm

Figure 1A graphically depicts the above sample locations.

Any EPA future action on the Westgate Trailer Park adjacent to Exide Battery will be pending upon the OSC's review of the report and analytical data.

ATTACHMENTS

Figures 1-3 Maps & Sketches

Attachment A - Photographs

B - Log Notes

C - Table of Witnesses

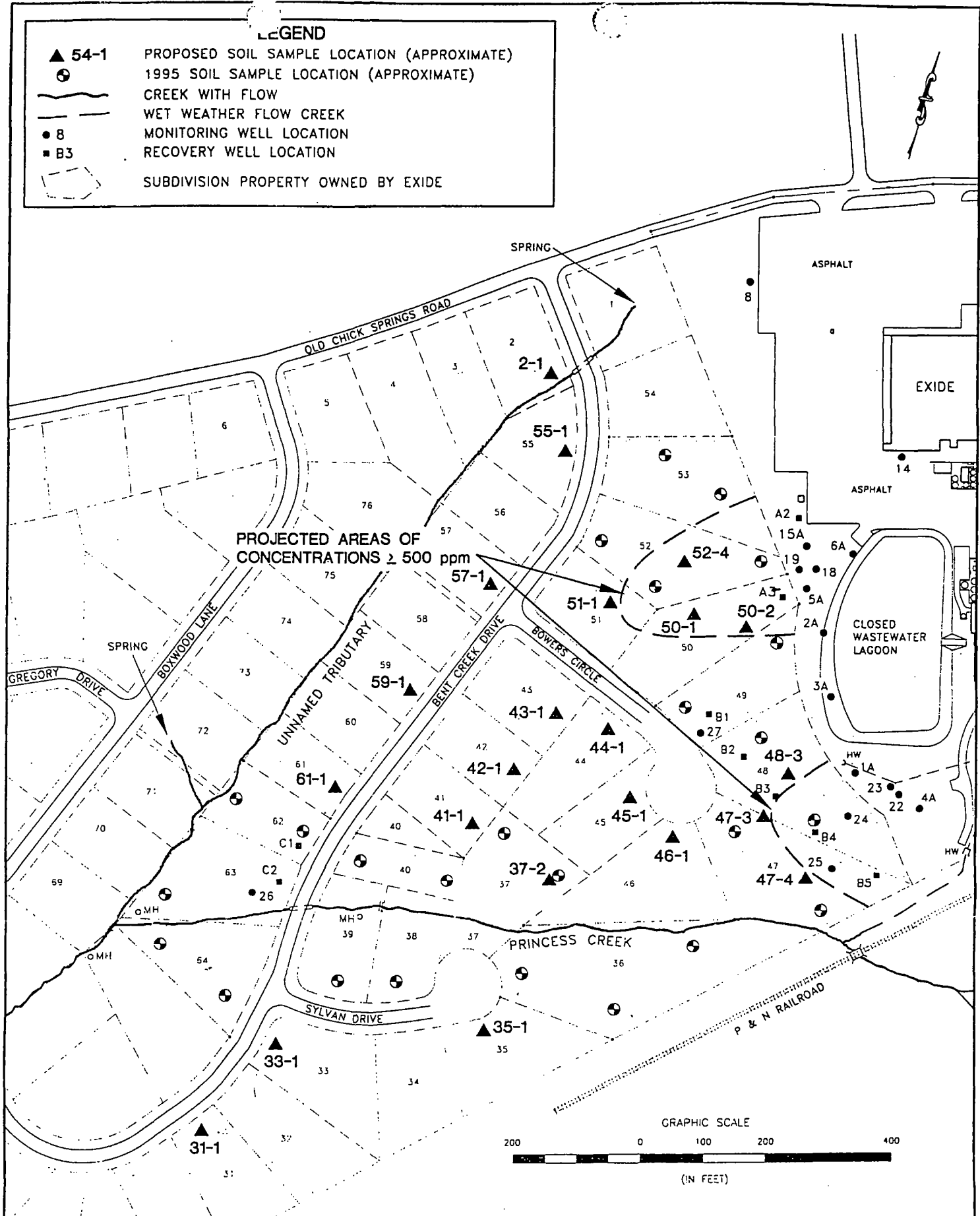
D - Site Safety Plan

E - Analytical Data

Page: 1A of 1A
Date: 12/09/96

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL 7421TL



THE FLETCHER GROUP

Greenville, South Carolina

DRAWN BY JOHN C. DATE 11-29-95, REVISED 05-06-96
 CHECKED BY KWW PROJECT NO. 265.04
 APPROVED BY KWW DRAWING NUMBER WKPL1295\26504805

FIGURE 5
PROPOSED REVISED SOIL SAMPLE LOCATIONS
EXIDE CORPORATION
GREER, SOUTH CAROLINA

TABLE 1.
SUMMARY OF NOV. 1996 SOIL LEAD CONCENTRATIONS
WEST GATE TRAILER PARK

Page: 1A of 2A
Date: 01/08/97

(DEPTHS 0-3" AND 9-12")

SITE	DATE	DEPTH (m)	RESULT TYPE	Lead (mg/kg)
WG-01	11/06/96	0.000	Set 1	494
WG-02	11/06/96	0.000	Set 1	373
WG-03	11/06/96	0.000	Set 1	434
WG-04	11/06/96	0.000	Set 1	280
WG-05	11/06/96	0.000	Set 1	513
WG-06	11/06/96	0.000	Set 1	638
WG-07	11/06/96	0.000	Set 1	1420
WG-08	11/06/96	0.000	Set 1	510
WG-09	11/06/96	0.000	Set 1	1030
WG-10	11/06/96	0.000	Set 1	572
WG-11	11/06/96	0.000	Set 1	837
WG-12	11/06/96	0.000	Set 1	764
WG-13	11/06/96	0.000	Set 1	441
WG-14	11/06/96	0.000	Set 1	1610
WG-15	11/06/96	0.000	Set 1	1460
WG-16	11/06/96	0.000	Set 1	86.7
WG-17	11/06/96	0.000	Set 1	45.8
WG-18	11/06/96	0.000	Set 1	159
WG-19	11/06/96	0.000	Set 1	52.7
WG-20	11/06/96	0.000	Set 1	46.6
WG-21	11/06/96	0.000	Set 1	116
WG-22	11/06/96	0.000	Set 1	439
WG-23	11/06/96	0.000	Set 1	376
WG-24	11/06/96	0.000	Set 1	243
WG-25	11/06/96	0.000	Set 1	589
WG-26	11/06/96	0.000	Set 1	962
WG-27	11/06/96	0.000	Set 1	397
WG-28	11/06/96	0.000	Set 1	578
WG-29	11/06/96	0.000	Set 1	482
WG-30	11/06/96	0.000	Set 1	370
WG-31	11/06/96	0.000	Set 1	199
WG-32	11/06/96	0.000	Set 1	441
WG-33	11/06/96	0.000	Set 1	302
WG-34	11/06/96	0.000	Set 1	146

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL 7421TL

TABLE 1.
SUMMARY OF NOV. 1996 SOIL LEAD CONCENTRATIONS
WEST GATE TRAILER PARK

Page: 2A of 2A
Date: 01/08/97

(DEPTHS 0-3" AND 9-12")

SITE	DATE	DEPTH (m)	RESULT TYPE	Lead (mg/kg)
WG-35	11/06/96	0.000	Set 1	41.3
WG-36	11/06/96	0.000	Set 1	384
WG-37	11/06/96	0.000	Set 1	642
WG-38	11/06/96	0.000	Set 1	480
WG-39	11/06/96	0.000	Set 1	284
WG-40	11/06/96	0.000	Set 1	115
WG-41	11/06/96	0.000	Set 1	31.2
WG-42	11/06/96	0.000	Set 1	392
WG-43	11/06/96	0.000	Set 1	18
WG-43	11/06/96	0.229	Set 1	25.7

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

For RCL 7421TL

UPDATED PRELIMINARY ASSESSMENT
HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

GENERAL BATTERY CORPORATION
EPA SITE NUMBER: SCD 042 633 859

EPA REGION: IV

SCORE STATUS: IN PREPARATION

SCORED BY: Craig Dukes

DATE OF THIS REPORT: April 6, 1988
DATE OF LAST MODIFICATION: November 14, 1980

GROUND WATER ROUTE SCORE: 59.18
SURFACE WATER ROUTE SCORE : Not Scored
AIR ROUTE SCORE : Not Scored

MIGRATION SCORE : 34.21

SITE: General Battery Corporation

HRS GROUND WATER ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. <u>Observed Release</u>	<u>Yes</u>	<u>45</u>	<u>45</u>
Comments: Lead and chromium have been found underlying this site. Lead levels as high as 820 ppb are reported in a closure plan prepared by SMC-Martin, 1980.			
2. <u>Route Characteristics</u>	- Not Scored due to Observed Release		
3. <u>Containment</u>	Not scored due to Observed Release. _____		_____
Comments:			
4. <u>Waste Characteristics</u>			
Toxicity/Persistence Matrix Value:		<u>18</u>	<u>18</u>
Comments: Lead-heavy metals score			
Waste Quantity: Cubic Yds	<u>9481*</u>		
Drums	_____		
Gallons	_____		
Tons	_____		
*Based on lagoon 8' deep with surface area of 32,000 ft.			
Total	<u>9481</u> Cu.yds.	<u>8</u>	<u>8</u>
TOTAL WASTE CHARACTERISTICS SCORE:			<u>26</u>
5. <u>Targets</u>			
Ground Water Use (three mile radius)	<u>3</u> (x3)		<u>9</u>
Comments: Sole source for persons not connected to public water lines.			
Distance to Nearest Well	<u>2000</u> feet to the southwest		
And	Matrix Value:	<u>20</u>	<u>20</u>
Total Population Served	<u>775</u> persons (three mile radius)		
Number of Houses	<u>204</u>		
Number of Persons	_____		
Number of Connections	_____		
Number of Irrigated Acres	_____		
TOTAL TARGETS SCORE:			<u>29</u>

SITE: General Battery Corporation

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
6.	If line 1 is 45, multiply $1 \times 4 \times 5$. If line 1 is 0, multiply $2 \times 3 \times 4 \times 5$.		
7.	Divide line 6 by 57,330 and multiply by 100 = Sgw.		

GROUND WATER ROUTE SCORE (Sgw) = 59.18

HRS SURFACE WATER ROUTE SCORE - Not Scored

SURFACE WATER ROUTE SCORE (Ssw) = Not Scored due to high groundwater score

HRS AIR ROUTE SCORE - Not Scored

AIR ROUTE SCORE (Sa) = Not Scored due to high groundwater score

UPDATED PRELIMINARY ASSESSMENT
HAZARDOUS RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: GENERAL BATTERY CORPORATION

Ground Water Route Score

Observed Release	<u>45</u>
Route Characteristics	<u> </u>
Containment	<u> </u>
Waste Characteristics	<u>26</u>
Targets	<u> </u>
	<u>29</u>

= 33,930/57,330 x 100 = 59.18 Sgw

Surface Water Route Score - Not Scored

Observed Release	<u> </u>
Route Characteristics	<u> </u>
Containment	<u> </u>
Waste Characteristics	<u> </u>
Targets	<u> </u>

= /64,350 x 100 = Ssw

Air Route Score - Not Scored

Observed Release	<u> </u>
Waste Characteristics	<u> </u>
Targets	<u> </u>

= /35,100 x 100 = Sa

Summary of Migration Score Calculations

	<u>S</u>	<u>S²</u>
Groundwater Route Score (S _{gw})	<u>59.18</u>	<u>3502.3</u>
Surface Water Route Score (S _{sw})	<u>N/A</u>	<u>N/A</u>
Air Route Score (S _a)	<u>N/A</u>	<u>N/A</u>
S ² _{gw} + S ² _{sw} + S ² _a		<u>3502.3</u>
S ² _{gw} + S ² _{sw} + S ² _a	<u>59.18</u>	
S ² _{gw} + S ² _{sw} + S ² _a /1.73 = S _m	<u>34.21</u>	

MAR 15 1983



POTENTIAL HAZARDOUS WASTE SITE IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION 4 SITE NUMBER (to be assigned by HQ)

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (Preliminary Assessment). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency, Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335), 401 M St., SW; Washington, DC 20460.

A. SCD042633859 GREENVILLE

IN
(or other identifier)

C. GENERAL BATTERY CORP

OLD CHICK SPRINGS RD

GEORGETOWN

E. ZIP CODE

F. COUNTY NAME

G. LEED, JEFFREY, PROJ LEAD* SC 29440
2153780852

2. TELEPHONE NUMBER

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION

Lagoon - Now cleared out.

"103-C NOTIFICATION"

EARL WILLIAMS

PHONE: 803-758-5544

DATE: 810609

K. DATE IDENTIFIED
(mo., day, & yr.)

2. TELEPHONE NUMBER

(complete this section last)

☐ 1. HIGH ☐ 2. MEDIUM ☒ 3. LOW ☐ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION

☒ 1. NO ACTION NEEDED (no hazard)

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:

b. WILL BE PERFORMED BY:

b. WILL BE PERFORMED BY:

☐ 4. SITE INSPECTION NEEDED (low priority)

C. PREPARER INFORMATION

1. NAME

2. TELEPHONE NUMBER

3. DATE (mo., day, & yr.)

Earl Williams

803-758-5544

9/14/82

III. SITE INFORMATION

A. SITE STATUS

☒ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

☐ 2. INACTIVE (Those sites which no longer receive wastes.)

☐ 3. OTHER (specify: *Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.*)

B. IS GENERATOR ON SITE?

☐ 1. NO

☒ 2. YES (specify generator's four-digit SIC Code):

C. AREA OF SITE (in acres)

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE (deg.-min.-sec.)

2. LONGITUDE (deg.-min.-sec.)

35,000 ft²

E. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO

☒ 2. YES (specify):

Continued From Front

IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		W.W. overflow

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

During the previous years occasional overflows of lead-containing wastewater from the water treatment operations were discharged into the lagoon. Preventative measures have been taken now.

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. UNKNOWN ☒ 2. LIQUID ☐ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☐ 5. HIGHLY VOLATILE
☒ 6. TOXIC ☐ 7. REACTIVE ☐ 8. INERT ☐ 9. FLAMMABLE

☐ 10. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

No.

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGENATED SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
(5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	Waste water
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify):		

Continued From Page 2

V. WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE (place in descending order of hazard).

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

*Series of monitoring wells have been installed.
Site has been cleared under C. Allen McEwen's approval.*

VI. HAZARD DESCRIPTION

	A. TYPE OF HAZARD	B. POTENTIAL HAZARD (mark 'X')	C. ALLEGED INCIDENT (mark 'X')	D. DATE OF INCIDENT (mo., day, yr.)	REMARKS
A	1. NO HAZARD				
B	2. HUMAN HEALTH				
C	3. NON-WORKER INJURY/EXPOSURE				
D	4. WORKER INJURY				
E	5. CONTAMINATION OF WATER SUPPLY				
F	6. CONTAMINATION OF FOOD CHAIN				
G	7. CONTAMINATION OF GROUND WATER				
H	8. CONTAMINATION OF SURFACE WATER				
I	9. DAMAGE TO FLORA/FAUNA				
J	10. FISH KILL				
K	11. CONTAMINATION OF AIR				
L	12. NOTICEABLE ODORS				
M	13. CONTAMINATION OF SOIL	X			
	14. PROPERTY DAMAGE				
	15. FIRE OR EXPLOSION				
	16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
	17. SEWER, STORM DRAIN PROBLEMS				
	18. EROSION PROBLEMS				
	19. INADEQUATE SECURITY				
	20. INCOMPATIBLE WASTES				
	21. MIDNIGHT DUMPING				
	22. OTHER (specify):				

Continued From Front

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- ☐ 1. NPDES PERMIT ☐ 2. SPCC PLAN ☐ 3. STATE PERMIT (specify): _____
☐ 4. AIR PERMITS ☐ 5. LOCAL PERMIT ☐ 6. RCRA TRANSPORTER
☐ 7. RCRA STORER ☐ 8. RCRA TREATER ☐ 9. RCRA DISPOSER
☐ 10. OTHER (specify): _____

B. IN COMPLIANCE?

- ☒ 1. YES ☐ 2. NO ☐ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number): _____

VIII. PAST REGULATORY ACTIONS

- ☒ A. NONE ☒ B. YES (summarize below)

~~Under Consent agreement being negotiated~~

IX. INSPECTION ACTIVITY (past or on-going)

- ☐ A. NONE ☒ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
Inspection		State	To take samples to observe
Monitoring		State	conditions of site

X. REMEDIAL ACTIVITY (past or on-going)

- ☒ A. NONE ☒ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION
Consent order		State	being negotiated

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.



POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION NUMBER (to be assigned by HQ) **IV**
SITE NUMBER (to be assigned by HQ) **SC0000010003**

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (Preliminary Assessment). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME General Battery Corp.		B. STREET (or other identifier) P.O. Box 538	
C. CITY Greer	D. STATE S.C.	E. ZIP CODE 29651	F. COUNTY NAME Greenville
G. OWNER/OPERATOR (if known) 1. NAME same as above		2. TELEPHONE NUMBER _____	
H. TYPE OF OWNERSHIP <input type="checkbox"/> 1. FEDERAL <input type="checkbox"/> 2. STATE <input type="checkbox"/> 3. COUNTY <input type="checkbox"/> 4. MUNICIPAL <input checked="" type="checkbox"/> 5. PRIVATE <input type="checkbox"/> 6. UNKNOWN			

I. SITE DESCRIPTION

GBC is located in the Santee drainage basin on flank of a groundwater divide.

J. HOW IDENTIFIED (i.e., citizen's complaints, OSHA citations, etc.) NG/S.C. Compliance Group	K. DATE IDENTIFIED (mo., day, & yr.) 9/12/80
L. PRINCIPAL STATE CONTACT 1. NAME Earl Williams	2. TELEPHONE NUMBER 803/753-5681

II. PRELIMINARY ASSESSMENT (complete this section last)

A. APPARENT SERIOUSNESS OF PROBLEM <input checked="" type="checkbox"/> 1. HIGH <input type="checkbox"/> 2. MEDIUM <input type="checkbox"/> 3. LOW <input type="checkbox"/> 4. NONE <input type="checkbox"/> 5. UNKNOWN	
B. RECOMMENDATION <input type="checkbox"/> 1. NO ACTION NEEDED (no hazard) <input checked="" type="checkbox"/> 2. IMMEDIATE SITE INSPECTION NEEDED a. TENTATIVELY SCHEDULED FOR: Week of Nov. 10, 1980 b. WILL BE PERFORMED BY: EPA - Ron Joyner <input type="checkbox"/> 3. SITE INSPECTION NEEDED (low priority)	

C. PREPARER INFORMATION

1. NAME Ron W. Joyner	2. TELEPHONE NUMBER 257-2234	3. DATE (mo., day, & yr.) 11/03/80
---------------------------------	----------------------------------------	----------------------------------------------

III. SITE INFORMATION

A. SITE STATUS <input type="checkbox"/> 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.) <input checked="" type="checkbox"/> 2. INACTIVE (Those sites which no longer receive wastes.) <input type="checkbox"/> 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)	
B. IS GENERATOR ON SITE? <input type="checkbox"/> 1. NO <input checked="" type="checkbox"/> 2. YES (specify generator's four-digit SIC Code): 2899	
C. AREA OF SITE (in acres)	D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES 1. LATITUDE (deg.-min.-sec.) 2. LONGITUDE (deg.-min.-sec.)
E. ARE THERE BUILDINGS ON THE SITE? <input checked="" type="checkbox"/> 1. NO <input type="checkbox"/> 2. YES (specify): _____	

CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		lagoon

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1. UNKNOWN ☒ 2. LIQUID ☐ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1. UNKNOWN ☒ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4. RADIOACTIVE ☐ 5. HIGHLY VOLATILE
☒ 6. TOXIC ☐ 7. REACTIVE ☐ 8. INERT ☐ 9. FLAMMABLE
☐ 10. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGENATED SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	X (3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
(5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			X (10) METALS		
			(11) OTHER (specify):		

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- ☐ 1. NPDES PERMIT ☐ 2. SPCC PLAN ☐ 3. STATE PERMIT (specify): _____
☐ 4. AIR PERMITS ☐ 5. LOCAL PERMIT ☐ 6. RCRA TRANSPORTER
☐ 7. RCRA STORER ☐ 8. RCRA TREATER ☐ 9. RCRA DISPOSER
☐ 10. OTHER (specify): _____

B. IN COMPLIANCE?

- ☐ 1. YES ☐ 2. NO ☐ 3. UNKNOWN

4. WITH RESPECT TO (list regulation name & number): _____

VIII. PAST REGULATORY ACTIONS

- ☐ A. NONE ☒ B. YES (summarize below)

GBC is under a State Administrative Order, GBC has a closure plan and is presently in process of closing site.

IX. INSPECTION ACTIVITY (past or on-going)

- ☐ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

X. REMEDIAL ACTIVITY (past or on-going)

- ☐ A. NONE ☐ B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (Section II) information on the first page of this form.



POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION SITE NUMBER

4 SCDO42633859

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency, Site Tracking System, Hazardous Waste Enforcement Task Force (EN-335), 401 M St., SW, Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME General Battery Corp	B. STREET	
C. CITY Greer	D. STATE SC	E. ZIP CODE

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	ACTION AGENCY				
	MARKING	EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED - NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED (If yes, complete Section III.)			X		
C. REMEDIAL ACTION NEEDED (If yes, complete Section IV.)					
D. ENFORCEMENT ACTION NEEDED (If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)					

E. RATIONALE FOR DISPOSITION

This site is contaminated with heavy metals and H_2SO_4 waste. The hazardous materials have migrated offsite.

This site received a high priority for an S.S.I.

Brian Holaway

9-13-88



POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION IV SITE NUMBER SC 000010003

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME General Battery Corp. B. STREET P.O. Box 588
C. CITY Greer D. STATE S.C. E. ZIP CODE 29651

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY			
		EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- NO HAZARD					
B. INVESTIGATIVE ACTION(S) NEEDED (If yes, complete Section III.)					
C. REMEDIAL ACTION NEEDED (If yes, complete Section IV.)					
D. ENFORCEMENT ACTION NEEDED (if yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)	X		X		

E. RATIONALE FOR DISPOSITION

Documented analysis show elevated Pb concentrations & low Ph in adjacent creek & in groundwater.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION (mo., day, & yr.)

G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED (mo., day, & yr.)

H. PREPARER INFORMATION

1. NAME Ron W. Joyner 2. TELEPHONE NUMBER 257-2234 3. DATE (mo., day, & yr.) 11/14/80

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

B. PROPOSED INVESTIGATIVE ACTIVITY (Detailed Information)

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION (mo, day, & yr)	3. TO BE PERFORMED BY (EPA, Contractor, State, etc.)	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION				
(1)				
(2)				
(3)				
b. TYPE OF MONITORING				
(1)				
(2)				
c. TYPE OF SAMPLING				
(1)				
(2)				

Continued From Front

III. INVESTIGATIVE ACTIVITY NEEDED and PART B-PROPOSED INVESTIGATIVE ACTIVITY (Continued)**d. TYPE OF LAB ANALYSIS**

(1) _____

(2) _____

e. OTHER (specify)

(1) _____

(2) _____

C. ELABORATE ON ANY OF THE INFORMATION PROVIDED IN PART B (on front & above) AS NEEDED TO IDENTIFY ADDITIONAL INVESTIGATIVE WORK.**D. ESTIMATED MANHOURS BY ACTION AGENCY**

1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES	1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES
a. EPA		b. STATE	
c. EPA CONTRACTOR		d. OTHER (specify)	

IV. REMEDIAL ACTIONS**A. SHORT TERM/EMERGENCY STRATEGY (On Site & Off-Site):** List all emergency actions needed to bring site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the space below.

1. ACTION	2. EST. START DATE (mo, day, & yr)	3. EST. END DATE (mo, day, & yr)	4. ACTION AGENCY (EPA, State, Private Party)	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	

B. LONG TERM STRATEGY (On Site & Off-Site): List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. EST. START DATE (mo, day, & yr)	3. EST. END DATE (mo, day, & yr)	4. ACTION AGENCY (EPA, State, Private Party)	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	

C. ESTIMATED MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES	1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES
a. EPA			b. STATE		
c. PRIVATE PARTIES			d. OTHER (specify)		



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION IV SITE NUMBER (to be assigned by HQ)
SC000010003

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME
General Battery Corp.
B. STREET (or other identifier)
P.O. Box 588 Old Chick Springs Rd
C. CITY
Greer
D. STATE
S.C.
E. ZIP CODE
29651
F. COUNTY NAME
Greenville

G. SITE OPERATOR INFORMATION

1. NAME
General Battery Corp.
2. TELEPHONE NUMBER
803/879-2165
3. STREET
P.O. Box 588
4. CITY
Greer
5. STATE
S.C.
6. ZIP CODE
29651

H. REALTY OWNER INFORMATION (if different from operator of site)

1. NAME
2. TELEPHONE NUMBER
3. CITY
4. STATE
5. ZIP CODE

I. SITE DESCRIPTION

old lagoon, now in disuse and drained, surrounded by small trees.

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)
11/14/80
B. APPARENT SERIOUSNESS OF PROBLEM
☒ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME
Ron W Joyner
2. TELEPHONE NUMBER
257-2234
3. DATE (mo., day, & yr.)
11/14/80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION
1. NAME
Ron W. Joyner
2. TITLE
Hydrogeologist
3. ORGANIZATION
U.S. EPA Uncontrolled Sites Section
4. TELEPHONE NO. (area code & no.)
257-2234

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Robert Hall	S.C. DHEC	803/242-9850

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Don Miller	Plant Engineer	Greer, S.C. 803/879-2165

Continued From Front

III. INSPECTION INFORMATION (continued)

D. GENERATOR INFORMATION (sources of waste)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
General Battery	803/879-2165	P.O. Box 588	H ₂ SO ₄ Heavy metals

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS

G. DATE OF INSPECTION

(mo., day, & yr.)

H. TIME OF INSPECTION

I. ACCESS GAINED BY: (credentials must be shown in all cases)

☒ 1. PERMISSION☐ 2. WARRANT

J. WEATHER (describe)

clear and cool

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER	X	samples taken by the SC. DHEC	now
b. SURFACE WATER	X	" " " " " "	now
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER (specify)			

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS

☒ a. GROUND ☒ b. AERIAL

2. PHOTOS IN CUSTODY OF:

Ron W. Joyner (ground) Co. has aerials

D. SITE MAPPED?

☒ YES. SPECIFY LOCATION OF MAPS:

General Battery.

E. COORDINATES

1. LATITUDE (deg.-min.-sec.)

2. LONGITUDE (deg.-min.-sec.)

V. SITE INFORMATION

A. SITE STATUS

☐ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)☒ 2. INACTIVE (Those sites which no longer receive wastes, however runoff from GBC still enters lagoon.)☐ 3. OTHER (specify):

(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

☐ 1. NO☒ 2. YES (specify generator's four-digit SIC Code): 2899C. AREA OF SITE (in ~~acres~~)

roughly 5 hectare

D. ARE THERE BUILDINGS ON THE SITE?

☒ 1. NO ☐ 2. YES (specify):

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		lagoon last used in 1971 1972

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

☐ 1. STORAGE ☐ 2. INCINERATION ☐ 3. LANDFILL ☒ 4. SURFACE IMPOUNDMENT ☐ 5. DEEP WELL

☐ 6. CHEM/BIO/PHYS TREATMENT ☐ 7. LANDFARM ☐ 8. OPEN DUMP ☐ 9. TRANSPORTER ☐ 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

☒ 1. LIQUID ☐ 2. SOLID ☐ 3. SLUDGE ☐ 4. GAS

B. WASTE CHARACTERISTICS

☒ 1. CORROSIVE ☐ 2. IGNITABLE ☐ 3. RADIOACTIVE ☐ 4. HIGHLY VOLATILE

☒ 5. TOXIC ☐ 6. REACTIVE ☒ 7. INERT ☐ 8. FLAMMABLE

☐ 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Continued From Front

1. WASTE RELATED INFORMATION (continue)

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE		b. OIL		c. SOLVENTS		d. CHEMICALS		e. SOLIDS		f. OTHER	
AMOUNT		AMOUNT		AMOUNT		AMOUNT		AMOUNT		AMOUNT	
UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE		UNIT OF MEASURE	
<input checked="" type="checkbox"/> (1) PAINT, PIGMENTS		<input checked="" type="checkbox"/> (1) OILY WASTES		<input checked="" type="checkbox"/> (1) HALOGENATED SOLVENTS		<input checked="" type="checkbox"/> (1) ACIDS H_2SO_4		<input checked="" type="checkbox"/> (1) FLYASH		<input checked="" type="checkbox"/> (1) LABORATORY, PHARMACEUT.	
(2) METALS SLUDGES		(2) OTHER(specify):		(2) NON-HALOGNTD. SOLVENTS		(2) PICKLING LIQUORS		(2) ASBESTOS		(2) HOSPITAL	
(3) POTW			(3) OTHER(specify):		(3) CAUSTICS		(3) MILLING/MINE TAILINGS		(3) RADIOACTIVE		
(4) ALUMINUM SLUDGE				(4) PESTICIDES		(4) FERROUS SMELTING WASTES		(4) MUNICIPAL			
(5) OTHER(specify):				(5) DYES/INKS		(5) NON-FERROUS SMELTG. WASTES		(5) OTHER(specify):			
				(6) CYANIDE		(6) OTHER(specify):					
						(7) PHENOLS					
						(8) HALOGENS					
						(9) PCB					
						(10) METALS $Hg + Cr + Pb$					
						(11) OTHER(specify):					

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X')			3. TOXICITY (mark 'X')				4. CAS NUMBER	5. AMOUNT	6. UNIT
	a. SOLID	b. LIQ.	c. VAPOR	a. HIGH	b. MED.	c. LOW	d. NONE			
Mercury				X						
Lead				X						
H_2SO_4		X		X						

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☐ A. HUMAN HEALTH HAZARDS

VIII. HAZARD DESCRIPTION (continued)

☐ B. NON-WORKER INJURY/EXPOSURE☐ C. WORKER INJURY/EXPOSURE☐ D. CONTAMINATION OF WATER SUPPLY☐ E. CONTAMINATION OF FOOD CHAIN☒ F. CONTAMINATION OF GROUND WATER

GBC has 15 groundwater monitoring wells and samples every month.

☒ G. CONTAMINATION OF SURFACE WATER

GBC & S.C. sample creek monthly.

VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA☐ I. FISH KILL☐ J. CONTAMINATION OF AIR☐ K. NOTICEABLE ODORS☐ L. CONTAMINATION OF SOIL☐ M. PROPERTY DAMAGE

VIII. HAZARD DESCRIPTION (continued)

☐ N. FIRE OR EXPLOSION☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID☐ P. SEWER, STORM DRAIN PROBLEMS☐ Q. EROSION PROBLEMS☐ R. INADEQUATE SECURITY☐ S. INCOMPATIBLE WASTES

VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

☐ U. OTHER (specify):

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS				
2. IN COMMERCIAL OR INDUSTRIAL AREAS				
3. IN PUBLICLY TRAVELLED AREAS				
4. PUBLIC USE AREAS (parks, schools, etc.)				

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit) <u>5 to 6 meters</u>	B. DIRECTION OF FLOW <u>toward the SW</u>	C. GROUNDWATER USE IN VICINITY
D. POTENTIAL YIELD OF AQUIFER <u>unknown</u>	E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)	F. DIRECTION TO DRINKING WATER SUPPLY
G. TYPE OF DRINKING WATER SUPPLY		
<input type="checkbox"/> 1. NON-COMMUNITY < 15 CONNECTIONS*	<input checked="" type="checkbox"/> 2. COMMUNITY (specify town): <u>Greer, SC.</u>	
<input type="checkbox"/> 3. SURFACE WATER	<input checked="" type="checkbox"/> 4. WELL	

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)**H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE**

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COM- MUNITY (mark 'X')	5. COMMUN- ITY (mark 'X')
—	—	NONE		

I. RECEIVING WATER

1. NAME
White Plains Branch
Princess Creek

☐ 2. SEWERS☒ 3. STREAMS/RIVERS☐ 4. LAKES/RESERVOIRS☐ 5. OTHER (specify):**6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS****XI. SOIL AND VEGETATION DATA****LOCATION OF SITE IS IN:**☐ A. KNOWN FAULT ZONE☐ B. KARST ZONE☐ C. 100 YEAR FLOOD PLAIN☐ D. WETLAND☐ E. A REGULATED FLOODWAY☐ F. CRITICAL HABITAT☒ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER**XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED**

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

*X	A. OVERBURDEN	*X	B. BEDROCK (specify below)	*X	C. OTHER (specify below)
X	1. SANDY clay	X	gneissic bedrock		
	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY☐ A. UNKNOWN☐ B. VERY HIGH (100,000 to 1000 cm/sec.)☐ C. HIGH (1000 to 10 cm/sec.)☒ D. MODERATE (10 to .1 cm/sec.)☐ E. LOW (.1 to .001 cm/sec.)☐ F. VERY LOW (.001 to .00001 cm/sec.)**G. RECHARGE AREA**☒ 1. YES☐ 2. NO

3. COMMENTS:

H. DISCHARGE AREA☐ 1. YES☐ 2. NO

3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE

5-10%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

toward SW

J. OTHER GEOLOGICAL DATA

The GBC plant is located in the Santee drainage basin on the southwest flank of a local groundwater divide area. The maximum thickness of the saprolite that overlies the gneissic bedrock was determined to be about 15 meters (in well D45-TP).

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UN- KNOWN

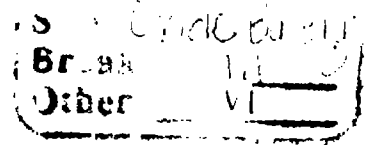
XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☐ YES (summarize in this space)

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (Section II) information on the first page of this form.

LAW OFFICES

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September 15, 2000

Mr. Chuck Aschwanden
General Counsel
National Enforcement Investigations Center
United States Environmental Protection Agency
Post Office Box 25227
Building 53
Denver Federal Center
Denver, CO 80225

RE: Project No.: R55, VP 0300

**Contamination of Westgate Trailer Park & King Acres Subdivision,
Greer, South Carolina/Exide Corporation**

Dear Mr. Aschwanden,

As indicated in our previous correspondence, of October and December 1999 and March 2000, we are inquiring as to the status of the final report which was drafted over two and a half years ago.

Please find enclosed a copy of a letter from Mr. Mike Norman of the EPA Region IV dated March 27, 2000 which indicates that the NEIC advised the final report would probably be complete within three months. We were advised via telephone on June 30, 2000 that the report would be complete in approximately 30 days. We would greatly appreciate you providing us with the status of the final report at your earliest convenience, or forwarding the final report to our office in the instance it has been completed.

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RE R55, VP 0300

Thank you for your assistance and please feel free to contact our office if you have any questions.

With best regards I am,

Yours very truly,

Raymond P. Mullman, Jr. 1cb

RAYMOND P. MULLMAN, JR.
Attorney at Law

RPM:cb
Enclosures

cc Mr. Mike Norman, US EPA, Region IV
Mr. Steve Macherer, Project Leader, NEIC
~~Mr.~~ Ralph Howard, US EPA, Region IV



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

March 27, 2000

4WD-NSMB

Mr. Gary W. Poliakoff
Poliakoff and Associates, P.A.
215 Magnolia Street
P.O. Box 1571
Spartanburg, South Carolina 29304

Subj: Exide Corporation - Exide Battery, Greer, South Carolina
National Enforcement Investigations Center (NEIC) Report

Dear Mr. Poliakoff:

EPA received your letter dated March 7, 2000, concerning the Exide Battery Site in Greer, South Carolina. The following information should help clarify the status of the NEIC report and its role in EPA's actions at this site.

The study conducted by NEIC was undertaken at the request of EPA Region 4's Air and Superfund programs in order to support EPA and/or State enforcement actions if needed, and to support EPA's cost recovery position for the 1994 Removal Action conducted in the trailer park. NEIC notified Region 4 by memorandum in April 1997 that it would undertake the study. Written summary updates were provided by NEIC in May 1998 and January of 1999. Since that time, EPA has reached a settlement with Exide Corporation regarding EPA's past response costs at the site, and the settlement is currently open for public comment. Because the study has fulfilled its intended purpose, once the settlement was reached, we advised NEIC that Region 4 no longer had need for a completed project. NEIC has indicated their desire to complete the project under its own funding. EPA expects to receive a copy of NEIC's final report when it becomes available. NEIC has advised us that they expect to complete their final report within the next three months. JUNE 27, 2000

We hope this information is useful to you. If you have any questions on this matter, please call me (404/562-8792) or Ralph Howard of my staff (404/562-8829), at any time.

Sincerely,

Mike Norman, Chief
South Carolina Remedial Section

cc: Reuben Bussey, EPA
Ralph Howard, EPA
Steve Machemer, NEIC/Denver